CUADERNILLO DE PREGUNTAS

# Saber 3°, 5° y 9° 2012

# Cuadernillo de prueba

# EJEMPLO DE PREGUNTAS
## Saber 3° Matemáticas

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# SABER 3

# SABER 3 - PRUEBA DE MATEMÁTICAS

- **Pregunta 1.**

Tres paquetes tienen 5 galletas cada uno. La cantidad de galletas que hay en total se puede expresar como

A. 5
B. 5 + 5 + 5
C. 3 + 5
D. 3 + 3 + 3

- **Estructura**

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Numérico - variacional |
| **Afirmación** | Generar equivalencias entre expresiones numéricas. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | B |

- **Resultados a nivel de Entidad Territorial certificada (ETC)**

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 17.9% | 56.0% | 16.1% | 6.4% | 3.6% | 800 |
| Antioquia | 18.6% | 59.5% | 12.6% | 7.1% | 2.2% | 22994 |
| Apartadó | 23.2% | 54.2% | 11.6% | 8.0% | 2.9% | 1357 |
| Arauca | 20.3% | 57.5% | 13.9% | 6.6% | 1.7% | 2079 |
| Armenia | 20.5% | 54.1% | 18.0% | 6.4% | 1.0% | 1916 |
| Atlántico | 18.6% | 59.4% | 11.2% | 6.9% | 3.9% | 4466 |
| Barrancabermeja | 18.4% | 58.6% | 15.2% | 5.7% | 2.2% | 1795 |
| Barranquilla | 18.2% | 59.8% | 13.2% | 6.4% | 2.4% | 7802 |
| Bello | 19.6% | 59.5% | 13.9% | 5.9% | 1.1% | 2933 |
| Bogotá, D.C. | 16.6% | 60.3% | 15.7% | 5.1% | 2.4% | 47935 |
| Bolívar | 20.8% | 52.2% | 12.6% | 10.0% | 4.4% | 8299 |
| Boyacá | 20.7% | 57.0% | 13.8% | 7.2% | 1.3% | 6891 |
| Bucaramanga | 16.3% | 63.1% | 14.3% | 5.0% | 1.3% | 3829 |
| Buenaventura | 16.1% | 63.5% | 10.7% | 7.2% | 2.4% | 2848 |
| Buga | 16.2% | 59.4% | 15.9% | 4.6% | 3.9% | 822 |
| Caldas | 19.6% | 59.5% | 12.4% | 7.0% | 1.6% | 4507 |
| Cali | 16.7% | 60.5% | 14.9% | 5.8% | 2.2% | 14472 |
| Caquetá | 19.7% | 60.4% | 11.0% | 7.3% | 1.6% | 2765 |
| Cartagena | 16.4% | 61.6% | 12.3% | 6.7% | 3.0% | 8117 |
| Cartago | 17.9% | 56.2% | 16.9% | 7.4% | 1.6% | 810 |
| Casanare | 21.8% | 50.7% | 16.9% | 8.7% | 1.9% | 2226 |
| Cauca | 15.9% | 64.6% | 10.5% | 6.6% | 2.4% | 9633 |
| Cesar | 17.6% | 61.7% | 11.0% | 7.1% | 2.6% | 6653 |
| Chocó | 18.6% | 54.5% | 12.1% | 10.2% | 4.6% | 3467 |
| Chía | 18.0% | 61.6% | 13.4% | 6.0% | 0.9% | 961 |
| Ciénaga | 17.9% | 61.7% | 8.9% | 5.9% | 5.5% | 1145 |
| Cundinamarca | 18.5% | 60.1% | 14.1% | 6.0% | 1.3% | 11913 |
| Córdoba | 18.1% | 57.6% | 11.8% | 9.5% | 3.1% | 9883 |
| Cúcuta | 20.3% | 56.5% | 15.8% | 6.3% | 1.1% | 5554 |
| Dosquebradas | 19.4% | 53.9% | 19.1% | 5.3% | 2.3% | 1195 |
| Duitama | 15.3% | 65.3% | 13.7% | 5.2% | 0.6% | 1002 |
| Envigado | 15.6% | 66.6% | 13.5% | 3.6% | 0.6% | 989 |
| Facatativá | 18.7% | 56.9% | 14.9% | 6.0% | 3.5% | 1082 |
| Florencia | 22.5% | 55.1% | 14.3% | 6.3% | 1.7% | 1576 |
| Floridablanca | 16.7% | 61.8% | 14.9% | 5.9% | 0.7% | 1916 |
| Fusagasugá | 17.3% | 58.6% | 16.1% | 7.0% | 1.0% | 1029 |
| Girardot | 18.3% | 56.4% | 13.4% | 9.2% | 2.8% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 18.5% | 59.5% | 15.8% | 6.0% | 0.3% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 1 |
| Guaviare | 21.9% | 53.0% | 14.0% | 8.3% | 2.7% | 807 |
| Huila | 18.9% | 58.9% | 13.2% | 7.6% | 1.5% | 6495 |
| Ibagué | 18.8% | 60.5% | 14.3% | 5.0% | 1.4% | 3875 |
| Ipiales | 19.8% | 58.7% | 14.9% | 5.7% | 0.9% | 1060 |
| Itagüí | 16.9% | 61.2% | 15.1% | 4.8% | 2.0% | 1337 |
| Jamundí | 18.3% | 54.2% | 18.3% | 7.2% | 2.0% | 814 |
| La Guajira | 16.7% | 59.0% | 12.6% | 9.0% | 2.7% | 3167 |
| Lorica | 18.8% | 56.8% | 12.8% | 9.8% | 1.9% | 1210 |
| Magangué | 22.8% | 52.0% | 12.0% | 9.6% | 3.6% | 1322 |
| Magdalena | 19.0% | 56.9% | 10.7% | 8.4% | 5.0% | 6777 |
| Maicao | 19.7% | 55.2% | 10.9% | 10.9% | 3.3% | 1599 |
| Malambo | 16.0% | 64.2% | 10.3% | 6.4% | 3.2% | 1034 |
| Manizales | 20.9% | 57.9% | 14.6% | 5.7% | 0.9% | 2465 |
| Medellín | 19.6% | 56.7% | 15.2% | 6.2% | 2.3% | 15391 |
| Meta | 19.7% | 55.1% | 15.4% | 7.2% | 2.6% | 4323 |
| Montería | 20.3% | 55.4% | 12.9% | 8.0% | 3.4% | 3814 |
| Mosquera | 17.7% | 60.4% | 15.9% | 5.5% | 0.5% | 854 |
| Nariño | 15.2% | 65.3% | 11.2% | 6.0% | 2.3% | 7668 |
| Neiva | 18.8% | 57.1% | 16.0% | 7.1% | 1.0% | 2915 |
| Norte de Santander | 17.9% | 62.7% | 12.4% | 5.9% | 1.1% | 6070 |
| Palmira | 17.6% | 59.1% | 16.6% | 5.2% | 1.5% | 2029 |
| Pasto | 17.3% | 60.6% | 15.6% | 5.4% | 1.1% | 3138 |
| Pereira | 21.1% | 54.9% | 15.4% | 7.0% | 1.6% | 3306 |
| Piedecuesta | 16.5% | 63.9% | 14.0% | 3.4% | 2.2% | 1128 |
| Pitalito | 18.3% | 59.4% | 13.3% | 7.7% | 1.3% | 1277 |
| Popayán | 18.3% | 59.5% | 15.0% | 5.7% | 1.5% | 2112 |
| Putumayo | 20.4% | 56.4% | 13.8% | 8.2% | 1.1% | 3178 |
| Quibdó | 18.9% | 60.2% | 9.2% | 8.0% | 3.8% | 1102 |
| Quindío | 20.2% | 56.2% | 13.3% | 8.0% | 2.4% | 2048 |
| Riohacha | 19.9% | 59.3% | 10.3% | 7.3% | 3.2% | 2025 |
| Rionegro | 18.6% | 58.7% | 16.0% | 6.3% | 0.5% | 813 |
| Risaralda | 20.6% | 56.9% | 13.5% | 7.0% | 1.9% | 2286 |
| Sabaneta | 18.2% | 63.5% | 14.9% | 2.7% | 0.6% | 329 |
| Sahagún | 16.3% | 59.6% | 13.7% | 7.6% | 2.7% | 997 |
| San Andrés | 20.1% | 57.2% | 13.6% | 6.5% | 2.6% | 418 |
| Santa Marta | 19.5% | 57.0% | 12.8% | 7.3% | 3.4% | 4045 |
| Santander | 17.6% | 62.2% | 13.0% | 6.2% | 0.9% | 6363 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 18.0% | 58.8% | 13.8% | 7.3% | 2.1% | 2578 |
| Soacha | 17.5% | 59.7% | 16.3% | 5.2% | 1.2% | 4048 |
| Sogamoso | 18.9% | 61.2% | 14.4% | 5.2% | 0.4% | 1119 |
| Soledad | 18.4% | 59.9% | 13.0% | 6.7% | 2.1% | 3865 |
| Sucre | 19.3% | 57.8% | 10.5% | 9.2% | 3.2% | 6080 |
| Tolima | 19.4% | 58.5% | 12.8% | 7.4% | 1.9% | 7517 |
| Tuluá | 17.5% | 58.9% | 16.8% | 5.7% | 1.0% | 1638 |
| Tumaco | 18.9% | 53.2% | 12.3% | 9.2% | 6.4% | 2161 |
| Tunja | 18.6% | 62.5% | 12.5% | 5.4% | 0.9% | 1288 |
| Turbo | 21.9% | 52.3% | 12.5% | 9.0% | 4.2% | 1473 |
| Uribia | 19.8% | 51.4% | 12.3% | 10.4% | 6.0% | 729 |
| Valle del Cauca | 20.4% | 55.5% | 15.0% | 6.7% | 2.4% | 6460 |
| Valledupar | 17.6% | 60.1% | 12.1% | 6.5% | 3.6% | 3519 |
| Vaupés | 0.0% | 33.3% | 16.7% | 0.0% | 50.0% | 6 |
| Vichada | 14.5% | 61.5% | 12.9% | 8.5% | 2.6% | 543 |
| Villavicencio | 17.6% | 60.3% | 15.4% | 5.4% | 1.2% | 4133 |
| Yopal | 20.9% | 53.8% | 15.9% | 7.7% | 1.8% | 1346 |
| Yumbo | 22.7% | 53.9% | 14.6% | 7.5% | 1.3% | 933 |
| Zipaquirá | 18.1% | 60.5% | 14.1% | 6.3% | 1.0% | 987 |
| Colombia | 18.3% | 59.0% | 13.7% | 6.7% | 2.3% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 2.

De lunes a jueves, Valeria deposita diariamente 3 monedas en su alcancía. ¿Cuántas monedas ha depositado Valeria durante estos 4 días?

A. 3
B. 4
C. 7
D. 12

## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Numérico - variacional |
| **Afirmación** | Resolver y formular problemas multiplicativos rutinarios de adición repetida. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | D |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 10.0% | 11.6% | 22.1% | 51.4% | 4.9% | 800 |
| Antioquia | 9.6% | 10.1% | 17.7% | 59.6% | 2.9% | 22994 |
| Apartadó | 12.6% | 13.6% | 18.1% | 52.0% | 3.8% | 1357 |
| Arauca | 10.2% | 10.3% | 19.7% | 57.3% | 2.5% | 2079 |
| Armenia | 9.2% | 8.4% | 25.2% | 56.0% | 1.2% | 1916 |
| Atlántico | 10.4% | 13.2% | 17.2% | 54.6% | 4.7% | 4466 |
| Barrancabermeja | 9.6% | 8.7% | 23.3% | 55.9% | 2.5% | 1795 |
| Barranquilla | 10.7% | 9.7% | 19.6% | 56.7% | 3.3% | 7802 |
| Bello | 8.4% | 8.8% | 15.5% | 65.6% | 1.7% | 2933 |
| Bogotá, D.C. | 6.7% | 6.1% | 18.0% | 66.4% | 2.9% | 47935 |
| Bolívar | 12.0% | 14.4% | 22.1% | 46.2% | 5.4% | 8299 |
| Boyacá | 9.2% | 10.3% | 19.7% | 58.9% | 1.9% | 6891 |
| Bucaramanga | 7.7% | 6.3% | 17.8% | 66.7% | 1.5% | 3829 |
| Buenaventura | 10.8% | 10.5% | 17.4% | 57.9% | 3.3% | 2848 |
| Buga | 7.4% | 8.2% | 18.9% | 61.2% | 4.4% | 822 |
| Caldas | 8.5% | 9.3% | 19.8% | 60.2% | 2.2% | 4507 |
| Cali | 8.5% | 8.0% | 19.3% | 61.5% | 2.7% | 14472 |
| Caquetá | 10.2% | 10.2% | 16.9% | 60.1% | 2.6% | 2765 |
| Cartagena | 11.1% | 11.0% | 17.5% | 56.1% | 4.4% | 8117 |
| Cartago | 10.2% | 9.9% | 19.1% | 58.1% | 2.6% | 810 |
| Casanare | 10.0% | 10.2% | 22.6% | 54.4% | 2.7% | 2226 |
| Cauca | 8.7% | 10.2% | 18.7% | 59.2% | 3.2% | 9633 |
| Cesar | 11.3% | 11.2% | 16.5% | 57.4% | 3.6% | 6653 |
| Chocó | 10.5% | 15.0% | 17.2% | 51.6% | 5.7% | 3467 |
| Chía | 6.6% | 4.5% | 16.0% | 71.1% | 1.9% | 961 |
| Ciénaga | 8.6% | 11.3% | 12.5% | 62.0% | 5.7% | 1145 |
| Cundinamarca | 8.2% | 7.8% | 19.2% | 63.0% | 1.8% | 11913 |
| Córdoba | 10.8% | 12.7% | 20.5% | 51.9% | 4.1% | 9883 |
| Cúcuta | 9.9% | 7.8% | 23.7% | 56.9% | 1.7% | 5554 |
| Dosquebradas | 8.3% | 6.5% | 19.8% | 62.4% | 2.9% | 1195 |
| Duitama | 4.0% | 7.1% | 16.0% | 72.3% | 0.7% | 1002 |
| Envigado | 4.9% | 6.0% | 12.9% | 74.9% | 1.3% | 989 |
| Facatativá | 5.9% | 8.1% | 20.5% | 61.6% | 3.9% | 1082 |
| Florencia | 9.7% | 9.8% | 21.1% | 57.0% | 2.4% | 1576 |
| Floridablanca | 6.4% | 6.8% | 18.1% | 67.4% | 1.3% | 1916 |
| Fusagasugá | 8.7% | 8.4% | 21.2% | 60.7% | 1.0% | 1029 |
| Girardot | 12.8% | 10.8% | 19.6% | 52.8% | 4.1% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 7.8% | 10.2% | 21.0% | 60.0% | 0.9% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 1 |
| Guaviare | 10.5% | 10.8% | 18.6% | 57.0% | 3.1% | 807 |
| Huila | 9.2% | 9.6% | 22.5% | 56.7% | 2.1% | 6495 |
| Ibagué | 7.1% | 8.8% | 20.4% | 61.1% | 2.6% | 3875 |
| Ipiales | 7.6% | 8.4% | 20.1% | 62.1% | 1.8% | 1060 |
| Itagüí | 9.6% | 10.4% | 15.9% | 61.4% | 2.8% | 1337 |
| Jamundí | 9.5% | 8.0% | 24.9% | 54.8% | 2.8% | 814 |
| La Guajira | 10.6% | 12.1% | 16.9% | 56.2% | 4.2% | 3167 |
| Lorica | 12.1% | 16.0% | 18.9% | 49.3% | 3.6% | 1210 |
| Magangué | 13.7% | 15.5% | 21.8% | 44.9% | 4.2% | 1322 |
| Magdalena | 11.6% | 14.4% | 17.5% | 50.6% | 5.8% | 6777 |
| Maicao | 13.1% | 12.3% | 19.6% | 50.2% | 4.8% | 1599 |
| Malambo | 11.1% | 10.2% | 16.4% | 58.5% | 3.8% | 1034 |
| Manizales | 7.7% | 7.5% | 18.2% | 65.1% | 1.5% | 2465 |
| Medellín | 9.3% | 8.6% | 16.8% | 62.4% | 3.0% | 15391 |
| Meta | 10.2% | 10.0% | 21.6% | 54.8% | 3.4% | 4323 |
| Montería | 10.7% | 11.9% | 21.9% | 51.8% | 3.7% | 3814 |
| Mosquera | 7.1% | 6.1% | 17.3% | 68.0% | 1.4% | 854 |
| Nariño | 7.8% | 8.4% | 17.0% | 63.7% | 3.1% | 7668 |
| Neiva | 9.5% | 8.4% | 23.6% | 56.2% | 2.3% | 2915 |
| Norte de Santander | 8.2% | 8.8% | 18.7% | 62.5% | 1.8% | 6070 |
| Palmira | 7.7% | 6.8% | 21.9% | 62.0% | 1.7% | 2029 |
| Pasto | 7.4% | 6.6% | 20.4% | 64.2% | 1.4% | 3138 |
| Pereira | 8.7% | 8.0% | 20.9% | 60.0% | 2.3% | 3306 |
| Piedecuesta | 6.8% | 6.8% | 18.9% | 64.9% | 2.6% | 1128 |
| Pitalito | 10.2% | 10.0% | 19.7% | 57.6% | 2.4% | 1277 |
| Popayán | 8.6% | 6.9% | 20.1% | 62.2% | 2.2% | 2112 |
| Putumayo | 10.5% | 10.0% | 23.3% | 53.9% | 2.3% | 3178 |
| Quibdó | 12.2% | 10.3% | 17.3% | 54.7% | 5.4% | 1102 |
| Quindío | 8.3% | 9.6% | 20.7% | 58.0% | 3.5% | 2048 |
| Riohacha | 10.8% | 12.0% | 19.0% | 54.4% | 3.9% | 2025 |
| Rionegro | 6.4% | 8.9% | 18.6% | 65.1% | 1.1% | 813 |
| Risaralda | 9.2% | 9.9% | 19.5% | 58.5% | 2.8% | 2286 |
| Sabaneta | 7.3% | 5.5% | 15.8% | 71.1% | 0.3% | 329 |
| Sahagún | 10.8% | 10.4% | 22.8% | 52.6% | 3.4% | 997 |
| San Andrés | 12.2% | 16.3% | 18.4% | 49.5% | 3.6% | 418 |
| Santa Marta | 11.1% | 9.8% | 18.6% | 57.0% | 3.5% | 4045 |
| Santander | 8.7% | 8.6% | 18.6% | 62.8% | 1.4% | 6363 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 11.9% | 10.7% | 19.6% | 54.6% | 3.2% | 2578 |
| Soacha | 7.7% | 7.7% | 19.4% | 63.4% | 1.8% | 4048 |
| Sogamoso | 6.8% | 7.5% | 19.4% | 65.5% | 0.8% | 1119 |
| Soledad | 10.3% | 9.9% | 18.6% | 58.7% | 2.5% | 3865 |
| Sucre | 12.0% | 13.6% | 21.6% | 48.8% | 4.0% | 6080 |
| Tolima | 9.6% | 10.6% | 19.9% | 57.2% | 2.7% | 7517 |
| Tuluá | 8.2% | 9.0% | 20.5% | 60.4% | 1.9% | 1638 |
| Tumaco | 10.3% | 14.3% | 17.7% | 50.0% | 7.7% | 2161 |
| Tunja | 6.5% | 8.3% | 15.1% | 68.5% | 1.6% | 1288 |
| Turbo | 13.6% | 13.1% | 20.2% | 48.6% | 4.5% | 1473 |
| Uribia | 11.7% | 13.0% | 18.4% | 48.0% | 8.9% | 729 |
| Valle del Cauca | 9.1% | 9.5% | 21.4% | 57.1% | 3.0% | 6460 |
| Valledupar | 9.5% | 10.0% | 18.3% | 58.0% | 4.3% | 3519 |
| Vaupés | 33.3% | 0.0% | 0.0% | 16.7% | 50.0% | 6 |
| Vichada | 7.6% | 11.6% | 19.3% | 57.8% | 3.7% | 543 |
| Villavicencio | 8.5% | 8.0% | 19.5% | 62.1% | 1.8% | 4133 |
| Yopal | 8.7% | 7.9% | 20.0% | 60.8% | 2.7% | 1346 |
| Yumbo | 9.3% | 9.0% | 22.5% | 58.4% | 0.8% | 933 |
| Zipaquirá | 7.2% | 6.5% | 20.7% | 64.4% | 1.2% | 987 |
| Colombia | 9.1% | 9.4% | 19.1% | 59.4% | 3.0% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 3.

Sobre algunos productos del supermercado se pegan adhesivos como los siguientes:

⊗ significa descuento de $2.000
● significa descuento de $1.000
● significa descuento de $500
○ significa descuento de $200

En el supermercado, este producto

tiene un descuento de

A. dos mil pesos.
B. mil pesos.
C. quinientos pesos.
D. doscientos pesos.

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación. |
| **Componente** | Numérico - variacional |
| **Afirmación** | Reconocer equivalencias entre diferentes tipos de representaciones relacionadas con números |
| **Nivel de desempeño** | Avanzado |
| **Respuesta Correcta** | B |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 34.6% | 33.5% | 14.5% | 12.1% | 5.3% | 800 |
| Antioquia | 35.0% | 39.8% | 13.4% | 8.8% | 3.0% | 22994 |
| Apartadó | 35.3% | 34.9% | 15.4% | 10.7% | 3.7% | 1357 |
| Arauca | 34.6% | 39.2% | 13.9% | 9.3% | 2.9% | 2079 |
| Armenia | 33.0% | 43.5% | 14.0% | 8.5% | 1.1% | 1916 |
| Atlántico | 28.2% | 42.8% | 14.1% | 10.2% | 4.7% | 4466 |
| Barrancabermeja | 35.2% | 41.1% | 13.0% | 8.1% | 2.7% | 1795 |
| Barranquilla | 33.9% | 42.8% | 11.8% | 7.9% | 3.5% | 7802 |
| Bello | 33.2% | 45.4% | 12.6% | 6.9% | 1.9% | 2933 |
| Bogotá, D.C. | 27.0% | 52.6% | 11.5% | 6.1% | 2.7% | 47935 |
| Bolívar | 33.2% | 31.5% | 16.8% | 12.3% | 6.2% | 8299 |
| Boyacá | 33.8% | 38.2% | 17.1% | 9.0% | 1.9% | 6891 |
| Bucaramanga | 29.1% | 52.9% | 10.9% | 5.7% | 1.4% | 3829 |
| Buenaventura | 32.7% | 42.5% | 12.1% | 9.7% | 3.0% | 2848 |
| Buga | 31.0% | 45.4% | 12.7% | 6.9% | 4.0% | 822 |
| Caldas | 33.9% | 42.9% | 13.2% | 8.0% | 2.0% | 4507 |
| Cali | 29.3% | 49.5% | 11.9% | 6.5% | 2.8% | 14472 |
| Caquetá | 32.7% | 40.3% | 14.9% | 10.1% | 2.1% | 2765 |
| Cartagena | 31.4% | 45.1% | 11.6% | 7.7% | 4.1% | 8117 |
| Cartago | 36.4% | 39.9% | 13.8% | 7.3% | 2.6% | 810 |
| Casanare | 39.7% | 33.7% | 13.9% | 9.9% | 2.7% | 2226 |
| Cauca | 28.1% | 46.7% | 12.9% | 9.1% | 3.2% | 9633 |
| Cesar | 31.9% | 42.2% | 13.2% | 9.1% | 3.6% | 6653 |
| Chocó | 27.1% | 32.4% | 18.0% | 16.1% | 6.4% | 3467 |
| Chía | 28.2% | 54.4% | 10.5% | 5.2% | 1.7% | 961 |
| Ciénaga | 24.5% | 48.8% | 12.1% | 7.9% | 6.6% | 1145 |
| Cundinamarca | 30.0% | 47.5% | 13.5% | 7.3% | 1.8% | 11913 |
| Córdoba | 31.5% | 36.9% | 16.6% | 10.6% | 4.4% | 9883 |
| Cúcuta | 38.6% | 40.8% | 12.0% | 7.2% | 1.4% | 5554 |
| Dosquebradas | 31.4% | 46.4% | 11.8% | 7.2% | 3.3% | 1195 |
| Duitama | 21.5% | 60.4% | 12.4% | 5.2% | 0.6% | 1002 |
| Envigado | 24.6% | 60.6% | 9.2% | 4.6% | 1.1% | 989 |
| Facatativá | 30.8% | 46.5% | 12.9% | 6.2% | 3.6% | 1082 |
| Florencia | 33.9% | 39.4% | 15.7% | 8.4% | 2.6% | 1576 |
| Floridablanca | 29.1% | 52.2% | 11.7% | 5.9% | 1.0% | 1916 |
| Fusagasugá | 34.2% | 43.7% | 13.6% | 7.3% | 1.2% | 1029 |
| Girardot | 37.8% | 39.0% | 14.1% | 5.7% | 3.5% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 31.4% | 46.7% | 12.9% | 8.1% | 1.0% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 1 |
| Guaviare | 35.2% | 33.8% | 16.6% | 11.9% | 2.5% | 807 |
| Huila | 36.1% | 40.2% | 13.7% | 8.1% | 1.8% | 6495 |
| Ibagué | 29.2% | 49.0% | 12.8% | 7.0% | 1.9% | 3875 |
| Ipiales | 30.9% | 48.5% | 11.2% | 8.0% | 1.3% | 1060 |
| Itagüí | 28.2% | 49.1% | 14.8% | 6.0% | 1.9% | 1337 |
| Jamundí | 37.6% | 37.3% | 14.1% | 8.6% | 2.3% | 814 |
| La Guajira | 29.6% | 39.3% | 16.3% | 10.4% | 4.4% | 3167 |
| Lorica | 28.6% | 35.7% | 18.9% | 13.1% | 3.6% | 1210 |
| Magangué | 37.1% | 28.4% | 16.6% | 12.9% | 5.0% | 1322 |
| Magdalena | 29.5% | 36.7% | 15.4% | 12.0% | 6.4% | 6777 |
| Maicao | 34.6% | 32.3% | 16.1% | 11.8% | 5.3% | 1599 |
| Malambo | 29.6% | 48.3% | 10.8% | 7.2% | 4.2% | 1034 |
| Manizales | 31.8% | 47.9% | 12.0% | 6.5% | 1.7% | 2465 |
| Medellín | 35.7% | 41.6% | 12.7% | 7.1% | 3.0% | 15391 |
| Meta | 35.7% | 37.0% | 15.3% | 8.6% | 3.4% | 4323 |
| Montería | 37.0% | 35.1% | 13.8% | 10.0% | 4.0% | 3814 |
| Mosquera | 31.1% | 47.9% | 11.9% | 7.7% | 1.3% | 854 |
| Nariño | 28.8% | 47.2% | 12.7% | 8.1% | 3.2% | 7668 |
| Neiva | 36.8% | 41.9% | 12.1% | 7.3% | 1.9% | 2915 |
| Norte de Santander | 31.2% | 45.3% | 14.4% | 7.2% | 1.9% | 6070 |
| Palmira | 31.1% | 49.1% | 10.9% | 7.1% | 1.7% | 2029 |
| Pasto | 28.7% | 49.9% | 12.3% | 7.2% | 1.9% | 3138 |
| Pereira | 35.6% | 42.6% | 12.1% | 7.6% | 2.1% | 3306 |
| Piedecuesta | 28.0% | 50.4% | 12.2% | 6.7% | 2.7% | 1128 |
| Pitalito | 35.5% | 41.2% | 13.2% | 8.5% | 1.6% | 1277 |
| Popayán | 31.6% | 47.1% | 12.5% | 6.8% | 1.9% | 2112 |
| Putumayo | 37.1% | 36.3% | 14.9% | 9.5% | 2.1% | 3178 |
| Quibdó | 34.0% | 36.8% | 14.1% | 9.3% | 5.7% | 1102 |
| Quindío | 33.3% | 40.1% | 14.6% | 9.0% | 2.9% | 2048 |
| Riohacha | 32.7% | 38.8% | 14.7% | 8.9% | 4.8% | 2025 |
| Rionegro | 31.1% | 47.2% | 14.1% | 6.4% | 1.1% | 813 |
| Risaralda | 35.2% | 38.2% | 15.0% | 9.1% | 2.5% | 2286 |
| Sabaneta | 28.9% | 55.3% | 8.8% | 6.1% | 0.9% | 329 |
| Sahagún | 34.8% | 38.2% | 14.0% | 9.2% | 3.7% | 997 |
| San Andrés | 40.9% | 31.1% | 13.4% | 12.0% | 2.6% | 418 |
| Santa Marta | 35.0% | 40.5% | 11.9% | 8.3% | 4.3% | 4045 |
| Santander | 29.3% | 48.7% | 13.3% | 7.5% | 1.2% | 6363 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 32.2% | 44.3% | 13.0% | 7.8% | 2.8% | 2578 |
| Soacha | 31.2% | 48.8% | 12.3% | 6.0% | 1.7% | 4048 |
| Sogamoso | 29.5% | 51.6% | 12.2% | 6.3% | 0.5% | 1119 |
| Soledad | 34.3% | 44.0% | 11.9% | 7.4% | 2.5% | 3865 |
| Sucre | 31.1% | 35.6% | 17.5% | 11.2% | 4.6% | 6080 |
| Tolima | 31.7% | 40.6% | 15.9% | 9.5% | 2.4% | 7517 |
| Tuluá | 32.8% | 47.1% | 11.5% | 6.5% | 2.2% | 1638 |
| Tumaco | 27.3% | 35.5% | 15.6% | 12.8% | 8.7% | 2161 |
| Tunja | 22.7% | 58.4% | 11.8% | 5.4% | 1.6% | 1288 |
| Turbo | 34.4% | 32.0% | 17.5% | 10.9% | 5.1% | 1473 |
| Uribia | 28.3% | 31.0% | 18.5% | 12.9% | 9.3% | 729 |
| Valle del Cauca | 33.0% | 41.8% | 13.2% | 8.8% | 3.1% | 6460 |
| Valledupar | 33.6% | 42.2% | 11.7% | 8.1% | 4.5% | 3519 |
| Vaupés | 16.7% | 16.7% | 0.0% | 16.7% | 50.0% | 6 |
| Vichada | 35.2% | 35.2% | 15.7% | 10.7% | 3.3% | 543 |
| Villavicencio | 34.0% | 46.2% | 11.3% | 6.9% | 1.6% | 4133 |
| Yopal | 37.1% | 37.7% | 13.9% | 8.8% | 2.6% | 1346 |
| Yumbo | 34.2% | 40.3% | 15.6% | 7.3% | 2.6% | 933 |
| Zipaquirá | 27.0% | 53.4% | 12.4% | 5.9% | 1.4% | 987 |
| Colombia | 31.7% | 43.8% | 13.3% | 8.2% | 3.0% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 4.

En un establecimiento de comidas rápidas venden estos combos:

| **Combo 1** | **Combo 2** | **Combo 3** | **Combo 4** |
|---|---|---|---|
| Hamburguesa y gaseosa | Perro caliente y gaseosa | Empanada y gaseosa | Papas y gaseosa |

Daniel quiere una empanada y una gaseosa. ¿Qué combo debe pedir?

A. El 1
B. El 2
C. El 3
D. El 4

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Numérico - variacional |
| **Afirmación** | Reconocer el uso de números naturales en diferentes contextos. |
| **Nivel de desempeño** | Mínimo |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 7.5% | 8.9% | 63.6% | 15.5% | 4.5% | 800 |
| Antioquia | 8.0% | 7.6% | 69.6% | 11.9% | 2.9% | 22994 |
| Apartadó | 10.7% | 9.7% | 62.4% | 12.9% | 4.3% | 1357 |
| Arauca | 8.6% | 6.9% | 72.1% | 10.0% | 2.5% | 2079 |
| Armenia | 7.2% | 7.2% | 75.4% | 9.1% | 1.2% | 1916 |
| Atlántico | 8.7% | 9.1% | 64.5% | 12.8% | 4.9% | 4466 |
| Barrancabermeja | 6.9% | 6.5% | 75.0% | 9.1% | 2.5% | 1795 |
| Barranquilla | 7.4% | 8.2% | 71.4% | 9.9% | 3.2% | 7802 |
| Bello | 6.5% | 5.0% | 79.0% | 8.0% | 1.5% | 2933 |
| Bogotá, D.C. | 4.3% | 4.0% | 82.7% | 6.3% | 2.7% | 47935 |
| Bolívar | 11.8% | 13.0% | 50.5% | 18.5% | 6.2% | 8299 |
| Boyacá | 7.6% | 8.2% | 71.4% | 11.2% | 1.7% | 6891 |
| Bucaramanga | 4.3% | 4.5% | 84.3% | 5.7% | 1.1% | 3829 |
| Buenaventura | 9.3% | 7.6% | 68.5% | 11.8% | 2.8% | 2848 |
| Buga | 5.1% | 7.1% | 76.3% | 6.8% | 4.7% | 822 |
| Caldas | 6.8% | 7.4% | 73.6% | 10.1% | 2.1% | 4507 |
| Cali | 5.6% | 5.3% | 78.7% | 7.9% | 2.5% | 14472 |
| Caquetá | 8.5% | 9.9% | 67.0% | 12.7% | 2.0% | 2765 |
| Cartagena | 7.2% | 7.8% | 70.1% | 11.0% | 3.8% | 8117 |
| Cartago | 6.7% | 4.4% | 76.4% | 9.9% | 2.6% | 810 |
| Casanare | 7.8% | 8.8% | 70.3% | 10.7% | 2.5% | 2226 |
| Cauca | 7.9% | 8.2% | 67.8% | 12.6% | 3.6% | 9633 |
| Cesar | 7.5% | 9.5% | 66.3% | 13.3% | 3.3% | 6653 |
| Chocó | 10.4% | 12.2% | 53.6% | 17.1% | 6.7% | 3467 |
| Chía | 4.0% | 3.3% | 84.2% | 7.1% | 1.5% | 961 |
| Ciénaga | 8.1% | 9.5% | 67.2% | 9.6% | 5.6% | 1145 |
| Cundinamarca | 5.6% | 6.0% | 78.8% | 7.9% | 1.7% | 11913 |
| Córdoba | 10.1% | 10.9% | 57.8% | 17.1% | 4.0% | 9883 |
| Cúcuta | 5.7% | 6.7% | 77.3% | 8.9% | 1.4% | 5554 |
| Dosquebradas | 5.9% | 4.2% | 80.1% | 7.4% | 2.5% | 1195 |
| Duitama | 4.0% | 4.1% | 86.7% | 5.0% | 0.2% | 1002 |
| Envigado | 3.0% | 3.6% | 87.6% | 4.9% | 0.9% | 989 |
| Facatativá | 4.2% | 3.7% | 82.1% | 6.4% | 3.7% | 1082 |
| Florencia | 9.4% | 8.6% | 69.4% | 9.8% | 2.8% | 1576 |
| Floridablanca | 3.4% | 4.2% | 84.4% | 6.9% | 1.1% | 1916 |
| Fusagasugá | 5.8% | 4.9% | 80.5% | 7.0% | 1.8% | 1029 |
| Girardot | 6.1% | 8.3% | 72.2% | 10.2% | 3.2% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 5.3% | 4.3% | 79.6% | 9.8% | 1.0% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 1 |
| Guaviare | 7.7% | 6.4% | 68.2% | 14.3% | 3.5% | 807 |
| Huila | 7.6% | 7.3% | 72.1% | 11.1% | 1.9% | 6495 |
| Ibagué | 5.6% | 5.8% | 78.5% | 8.1% | 2.0% | 3875 |
| Ipiales | 5.3% | 6.5% | 78.9% | 8.2% | 1.1% | 1060 |
| Itagüí | 5.3% | 4.9% | 78.2% | 9.1% | 2.5% | 1337 |
| Jamundí | 6.9% | 5.5% | 72.1% | 13.3% | 2.2% | 814 |
| La Guajira | 9.3% | 10.9% | 60.7% | 15.2% | 4.0% | 3167 |
| Lorica | 10.2% | 11.6% | 56.1% | 17.7% | 4.5% | 1210 |
| Magangué | 12.9% | 14.0% | 48.4% | 19.7% | 5.0% | 1322 |
| Magdalena | 9.8% | 12.0% | 56.0% | 15.8% | 6.5% | 6777 |
| Maicao | 10.7% | 13.1% | 58.8% | 13.1% | 4.2% | 1599 |
| Malambo | 8.5% | 7.3% | 67.5% | 12.7% | 4.1% | 1034 |
| Manizales | 5.3% | 4.8% | 79.8% | 8.6% | 1.4% | 2465 |
| Medellín | 6.1% | 5.4% | 75.5% | 10.0% | 3.0% | 15391 |
| Meta | 8.0% | 8.3% | 70.7% | 9.9% | 3.1% | 4323 |
| Montería | 8.8% | 9.8% | 63.2% | 13.8% | 4.4% | 3814 |
| Mosquera | 5.6% | 2.8% | 84.0% | 6.8% | 0.8% | 854 |
| Nariño | 5.9% | 6.9% | 73.7% | 10.6% | 2.9% | 7668 |
| Neiva | 7.6% | 6.0% | 75.3% | 9.1% | 2.0% | 2915 |
| Norte de Santander | 7.1% | 6.5% | 75.0% | 9.8% | 1.6% | 6070 |
| Palmira | 4.8% | 4.8% | 80.7% | 7.5% | 2.2% | 2029 |
| Pasto | 4.8% | 5.2% | 80.8% | 7.9% | 1.4% | 3138 |
| Pereira | 6.1% | 5.5% | 77.7% | 8.3% | 2.4% | 3306 |
| Piedecuesta | 5.3% | 4.8% | 82.2% | 5.9% | 1.9% | 1128 |
| Pitalito | 7.4% | 7.3% | 73.9% | 9.9% | 1.5% | 1277 |
| Popayán | 6.3% | 5.3% | 79.3% | 7.5% | 1.7% | 2112 |
| Putumayo | 7.8% | 8.8% | 67.5% | 13.4% | 2.5% | 3178 |
| Quibdó | 9.0% | 9.5% | 63.6% | 12.8% | 5.1% | 1102 |
| Quindío | 6.8% | 6.6% | 71.2% | 12.0% | 3.4% | 2048 |
| Riohacha | 8.8% | 9.7% | 64.8% | 12.7% | 3.9% | 2025 |
| Rionegro | 5.5% | 4.3% | 79.0% | 10.3% | 0.9% | 813 |
| Risaralda | 7.2% | 6.7% | 70.9% | 12.3% | 2.9% | 2286 |
| Sabaneta | 3.0% | 2.4% | 88.1% | 6.4% | 0.0% | 329 |
| Sahagún | 5.6% | 9.7% | 64.4% | 16.5% | 3.7% | 997 |
| San Andrés | 8.4% | 12.0% | 62.2% | 14.1% | 3.3% | 418 |
| Santa Marta | 7.9% | 8.2% | 69.1% | 10.8% | 4.0% | 4045 |
| Santander | 5.6% | 6.5% | 77.8% | 9.0% | 1.2% | 6363 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 8.5% | 8.9% | 70.6% | 9.5% | 2.5% | 2578 |
| Soacha | 5.2% | 4.8% | 81.0% | 7.3% | 1.7% | 4048 |
| Sogamoso | 4.6% | 5.3% | 82.5% | 6.4% | 1.2% | 1119 |
| Soledad | 6.8% | 7.7% | 74.4% | 8.9% | 2.2% | 3865 |
| Sucre | 10.5% | 12.2% | 55.4% | 17.5% | 4.5% | 6080 |
| Tolima | 8.4% | 8.0% | 68.3% | 12.8% | 2.4% | 7517 |
| Tuluá | 5.9% | 5.3% | 78.0% | 8.7% | 2.1% | 1638 |
| Tumaco | 12.7% | 10.5% | 52.7% | 15.7% | 8.4% | 2161 |
| Tunja | 5.1% | 4.8% | 82.1% | 6.7% | 1.2% | 1288 |
| Turbo | 13.2% | 11.3% | 54.2% | 16.4% | 4.8% | 1473 |
| Uribia | 9.3% | 14.5% | 52.8% | 14.5% | 8.8% | 729 |
| Valle del Cauca | 7.0% | 7.8% | 72.3% | 10.0% | 2.8% | 6460 |
| Valledupar | 7.4% | 8.1% | 69.9% | 10.4% | 4.2% | 3519 |
| Vaupés | 0.0% | 0.0% | 50.0% | 0.0% | 50.0% | 6 |
| Vichada | 7.9% | 9.0% | 65.6% | 13.6% | 3.9% | 543 |
| Villavicencio | 5.2% | 5.8% | 80.0% | 7.2% | 1.9% | 4133 |
| Yopal | 6.1% | 6.2% | 78.4% | 7.0% | 2.3% | 1346 |
| Yumbo | 6.6% | 8.0% | 72.3% | 10.3% | 2.7% | 933 |
| Zipaquirá | 4.9% | 3.9% | 82.6% | 7.4% | 1.3% | 987 |
| Colombia | 7.0% | 7.2% | 72.5% | 10.4% | 2.9% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 5.

Diana tenía 5 dulces y Pedro tenía 3. Luego Roberto le regaló 2 dulces a cada uno.

¿Cuál de las siguientes afirmaciones es correcta?

A. Quien tenía más dulces sigue teniendo más.
B. Ahora los dos tienen menos dulces que antes.
C. Ahora los dos tienen la misma cantidad de dulces.
D. Quien tenía más dulces, ahora tiene menos.

## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Numérico - variacional |
| **Afirmación** | Usar operaciones y propiedades de los números naturales para establecer relaciones entre ellos en situaciones específicas. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

- **Resultados a nivel de Entidad Territorial certificada (ETC)**

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 49.4% | 11.3% | 19.8% | 16.4% | 3.3% | 800 |
| Antioquia | 58.9% | 8.6% | 16.3% | 13.9% | 2.4% | 22994 |
| Apartadó | 53.9% | 9.7% | 18.5% | 14.7% | 3.2% | 1357 |
| Arauca | 57.7% | 9.3% | 17.4% | 14.0% | 1.6% | 2079 |
| Armenia | 57.5% | 9.6% | 19.9% | 12.2% | 0.9% | 1916 |
| Atlántico | 56.3% | 9.6% | 16.5% | 13.1% | 4.4% | 4466 |
| Barrancabermeja | 59.1% | 9.5% | 16.2% | 12.7% | 2.5% | 1795 |
| Barranquilla | 57.6% | 7.9% | 18.8% | 13.0% | 2.7% | 7802 |
| Bello | 62.4% | 6.9% | 17.7% | 11.8% | 1.2% | 2933 |
| Bogotá, D.C. | 63.9% | 6.2% | 15.3% | 12.2% | 2.5% | 47935 |
| Bolívar | 46.2% | 12.6% | 18.6% | 17.4% | 5.1% | 8299 |
| Boyacá | 56.1% | 9.8% | 17.9% | 14.8% | 1.4% | 6891 |
| Bucaramanga | 65.8% | 6.7% | 15.5% | 10.9% | 1.1% | 3829 |
| Buenaventura | 60.4% | 7.4% | 16.2% | 13.8% | 2.3% | 2848 |
| Buga | 59.6% | 5.2% | 17.8% | 13.5% | 3.9% | 822 |
| Caldas | 60.3% | 7.7% | 17.3% | 13.2% | 1.6% | 4507 |
| Cali | 62.9% | 7.0% | 15.7% | 12.0% | 2.4% | 14472 |
| Caquetá | 59.3% | 10.6% | 16.5% | 12.2% | 1.5% | 2765 |
| Cartagena | 59.6% | 8.3% | 16.5% | 12.5% | 3.2% | 8117 |
| Cartago | 61.9% | 7.2% | 17.7% | 11.5% | 1.9% | 810 |
| Casanare | 52.2% | 9.7% | 19.2% | 16.8% | 2.2% | 2226 |
| Cauca | 60.0% | 7.6% | 15.9% | 13.6% | 2.9% | 9633 |
| Cesar | 57.7% | 8.3% | 17.7% | 13.4% | 2.9% | 6653 |
| Chocó | 52.6% | 11.7% | 14.8% | 15.9% | 5.0% | 3467 |
| Chía | 65.9% | 4.8% | 15.2% | 12.8% | 1.4% | 961 |
| Ciénaga | 60.1% | 8.7% | 14.6% | 10.9% | 5.7% | 1145 |
| Cundinamarca | 60.5% | 7.7% | 16.7% | 13.7% | 1.4% | 11913 |
| Córdoba | 50.8% | 11.8% | 18.5% | 15.7% | 3.2% | 9883 |
| Cúcuta | 58.0% | 8.4% | 17.6% | 14.7% | 1.4% | 5554 |
| Dosquebradas | 61.7% | 6.2% | 18.1% | 11.1% | 2.9% | 1195 |
| Duitama | 67.8% | 7.1% | 16.2% | 8.8% | 0.2% | 1002 |
| Envigado | 72.8% | 5.8% | 11.9% | 8.6% | 0.9% | 989 |
| Facatativá | 60.5% | 7.0% | 17.5% | 11.5% | 3.5% | 1082 |
| Florencia | 54.3% | 9.8% | 17.8% | 15.5% | 2.5% | 1576 |
| Floridablanca | 64.7% | 7.2% | 14.8% | 12.6% | 0.7% | 1916 |
| Fusagasugá | 59.7% | 6.6% | 19.8% | 12.4% | 1.5% | 1029 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girardot | 55.5% | 9.2% | 16.7% | 14.7% | 3.9% | 688 |
| Girón | 56.2% | 9.2% | 18.5% | 15.4% | 0.8% | 1046 |
| Guainía | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 1 |
| Guaviare | 58.4% | 9.3% | 17.5% | 11.8% | 3.1% | 807 |
| Huila | 56.9% | 9.4% | 17.5% | 14.7% | 1.5% | 6495 |
| Ibagué | 61.3% | 8.1% | 17.6% | 11.3% | 1.8% | 3875 |
| Ipiales | 59.8% | 7.4% | 18.8% | 13.0% | 1.0% | 1060 |
| Itagüí | 61.4% | 8.2% | 15.7% | 12.7% | 2.0% | 1337 |
| Jamundí | 56.5% | 10.0% | 16.8% | 14.1% | 2.6% | 814 |
| La Guajira | 55.2% | 10.3% | 17.4% | 13.7% | 3.4% | 3167 |
| Lorica | 50.0% | 12.1% | 18.7% | 16.7% | 2.6% | 1210 |
| Magangué | 42.9% | 14.1% | 21.0% | 18.0% | 4.0% | 1322 |
| Magdalena | 52.1% | 10.4% | 16.6% | 15.3% | 5.6% | 6777 |
| Maicao | 45.5% | 13.9% | 19.2% | 17.4% | 4.0% | 1599 |
| Malambo | 61.5% | 9.6% | 13.2% | 11.7% | 4.0% | 1034 |
| Manizales | 64.1% | 6.1% | 15.5% | 13.3% | 1.0% | 2465 |
| Medellín | 60.9% | 7.1% | 16.3% | 13.1% | 2.6% | 15391 |
| Meta | 55.5% | 10.2% | 18.1% | 13.7% | 2.5% | 4323 |
| Montería | 51.1% | 10.6% | 20.1% | 14.7% | 3.6% | 3814 |
| Mosquera | 63.0% | 7.1% | 15.0% | 14.2% | 0.7% | 854 |
| Nariño | 62.5% | 7.7% | 15.8% | 11.6% | 2.4% | 7668 |
| Neiva | 56.0% | 10.0% | 18.1% | 14.4% | 1.5% | 2915 |
| Norte de Santander | 61.0% | 8.3% | 15.9% | 13.6% | 1.1% | 6070 |
| Palmira | 62.0% | 7.2% | 16.5% | 12.7% | 1.6% | 2029 |
| Pasto | 62.8% | 6.5% | 17.7% | 12.0% | 1.0% | 3138 |
| Pereira | 60.6% | 7.0% | 16.7% | 13.9% | 1.8% | 3306 |
| Piedecuesta | 61.5% | 6.2% | 19.0% | 11.4% | 1.9% | 1128 |
| Pitalito | 58.0% | 8.1% | 18.0% | 14.7% | 1.2% | 1277 |
| Popayán | 63.0% | 7.1% | 16.4% | 11.9% | 1.7% | 2112 |
| Putumayo | 53.6% | 10.9% | 19.8% | 14.3% | 1.4% | 3178 |
| Quibdó | 57.5% | 7.6% | 15.4% | 15.1% | 4.4% | 1102 |
| Quindío | 55.2% | 10.4% | 18.6% | 13.5% | 2.4% | 2048 |
| Riohacha | 55.8% | 9.3% | 18.3% | 13.5% | 3.1% | 2025 |
| Rionegro | 60.0% | 7.5% | 17.1% | 14.6% | 0.7% | 813 |
| Risaralda | 58.1% | 7.6% | 18.9% | 13.3% | 2.1% | 2286 |
| Sabaneta | 73.9% | 4.0% | 11.2% | 10.6% | 0.3% | 329 |
| Sahagún | 53.3% | 9.2% | 20.8% | 14.1% | 2.6% | 997 |
| San Andrés | 55.3% | 12.0% | 18.9% | 12.4% | 1.4% | 418 |
| Santa Marta | 56.4% | 8.1% | 17.1% | 15.0% | 3.4% | 4045 |

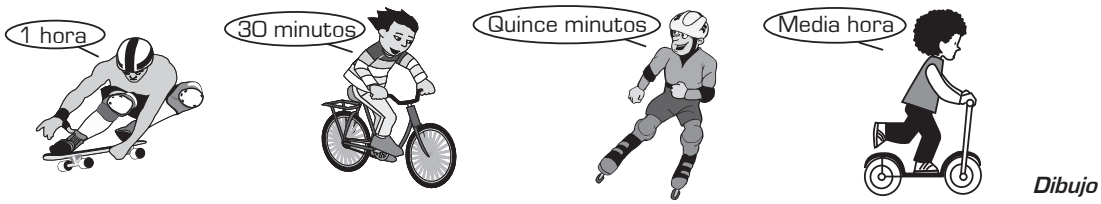
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Santander | 62.0% | 8.1% | 15.6% | 13.3% | 1.1% | 6363 |
| Sincelejo | 58.2% | 9.7% | 18.3% | 11.4% | 2.3% | 2578 |
| Soacha | 60.3% | 7.7% | 16.9% | 13.6% | 1.4% | 4048 |
| Sogamoso | 62.9% | 7.0% | 15.6% | 14.1% | 0.4% | 1119 |
| Soledad | 60.3% | 8.7% | 15.9% | 12.7% | 2.4% | 3865 |
| Sucre | 50.3% | 11.8% | 18.8% | 16.0% | 3.1% | 6080 |
| Tolima | 56.2% | 8.8% | 18.8% | 14.4% | 1.8% | 7517 |
| Tuluá | 61.4% | 6.7% | 18.9% | 11.4% | 1.8% | 1638 |
| Tumaco | 51.1% | 10.7% | 15.7% | 15.4% | 7.1% | 2161 |
| Tunja | 65.5% | 7.8% | 14.2% | 11.7% | 0.9% | 1288 |
| Turbo | 48.1% | 11.3% | 17.9% | 18.3% | 4.4% | 1473 |
| Uribia | 43.6% | 13.3% | 19.1% | 17.4% | 6.6% | 729 |
| Valle del Cauca | 57.9% | 8.3% | 17.3% | 14.2% | 2.2% | 6460 |
| Valledupar | 59.5% | 7.6% | 15.8% | 13.6% | 3.6% | 3519 |
| Vaupés | 33.3% | 0.0% | 0.0% | 16.7% | 50.0% | 6 |
| Vichada | 55.6% | 10.5% | 16.4% | 14.5% | 2.9% | 543 |
| Villavicencio | 60.2% | 8.0% | 17.9% | 12.6% | 1.4% | 4133 |
| Yopal | 58.2% | 8.6% | 16.0% | 15.2% | 1.9% | 1346 |
| Yumbo | 56.7% | 8.3% | 18.0% | 15.4% | 1.6% | 933 |
| Zipaquirá | 65.8% | 6.3% | 14.0% | 12.4% | 1.6% | 987 |
| Colombia | 58.8% | 8.4% | 16.9% | 13.5% | 2.5% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 6.

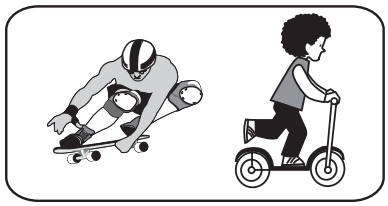
El tiempo que tardan cuatro amigos para llegar de su casa al parque se muestra en el dibujo.



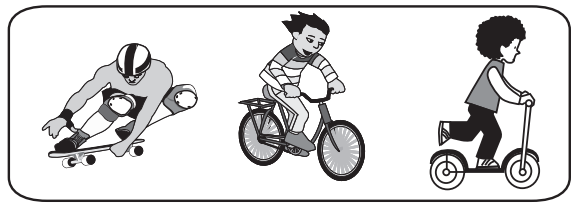

*Dibujo*

¿Quiénes tardan el mismo tiempo?

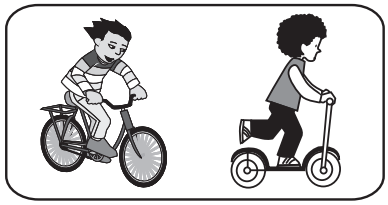
A.



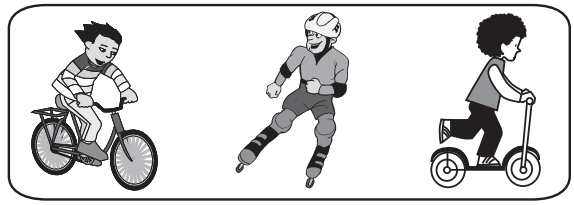
B.



C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Desarrollar procesos de medición usando patrones e instrumentos estandarizados. |
| **Nivel de desempeño** | Avanzado |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 23.1% | 20.4% | 36.6% | 16.1% | 3.8% | 800 |
| Antioquia | 21.3% | 14.6% | 47.9% | 13.6% | 2.6% | 22994 |
| Apartadó | 23.1% | 16.1% | 43.3% | 13.6% | 3.9% | 1357 |
| Arauca | 23.3% | 13.0% | 46.3% | 15.7% | 1.7% | 2079 |
| Armenia | 24.0% | 12.6% | 49.1% | 12.9% | 1.5% | 1916 |
| Atlántico | 18.6% | 16.6% | 46.7% | 13.6% | 4.5% | 4466 |
| Barrancabermeja | 23.2% | 13.6% | 47.6% | 12.7% | 2.9% | 1795 |
| Barranquilla | 21.6% | 14.1% | 47.0% | 14.4% | 2.9% | 7802 |
| Bello | 24.0% | 11.9% | 52.6% | 10.2% | 1.3% | 2933 |
| Bogotá, D.C. | 24.6% | 10.2% | 52.1% | 10.3% | 2.7% | 47935 |
| Bolívar | 20.2% | 20.0% | 36.7% | 17.7% | 5.5% | 8299 |
| Boyacá | 23.9% | 14.4% | 45.4% | 14.6% | 1.7% | 6891 |
| Bucaramanga | 22.0% | 11.3% | 55.7% | 10.1% | 1.0% | 3829 |
| Buenaventura | 21.3% | 15.6% | 44.8% | 15.7% | 2.6% | 2848 |
| Buga | 29.0% | 10.8% | 42.8% | 12.9% | 4.5% | 822 |
| Caldas | 23.0% | 13.2% | 48.8% | 13.2% | 1.8% | 4507 |
| Cali | 26.9% | 10.7% | 48.8% | 11.2% | 2.4% | 14472 |
| Caquetá | 19.0% | 13.9% | 51.4% | 13.9% | 1.9% | 2765 |
| Cartagena | 20.3% | 13.3% | 48.8% | 14.0% | 3.6% | 8117 |
| Cartago | 25.1% | 12.0% | 50.1% | 10.6% | 2.2% | 810 |
| Casanare | 26.5% | 14.8% | 39.8% | 16.1% | 2.7% | 2226 |
| Cauca | 20.9% | 13.9% | 48.9% | 13.4% | 2.9% | 9633 |
| Cesar | 19.1% | 15.1% | 47.8% | 14.9% | 3.1% | 6653 |
| Chocó | 17.4% | 19.5% | 40.6% | 16.9% | 5.6% | 3467 |
| Chía | 23.3% | 8.5% | 57.8% | 9.6% | 0.8% | 961 |
| Ciénaga | 15.6% | 13.2% | 54.4% | 11.7% | 5.1% | 1145 |
| Cundinamarca | 24.0% | 11.2% | 51.3% | 11.8% | 1.7% | 11913 |
| Córdoba | 20.4% | 18.2% | 41.2% | 16.4% | 3.8% | 9883 |
| Cúcuta | 25.5% | 11.8% | 48.6% | 12.8% | 1.4% | 5554 |
| Dosquebradas | 24.4% | 10.5% | 51.4% | 11.1% | 2.7% | 1195 |
| Duitama | 20.9% | 10.2% | 60.4% | 8.4% | 0.2% | 1002 |
| Envigado | 18.9% | 8.4% | 62.7% | 8.6% | 1.4% | 989 |
| Facatativá | 22.9% | 10.5% | 51.7% | 11.1% | 3.8% | 1082 |
| Florencia | 24.1% | 13.6% | 44.0% | 16.0% | 2.2% | 1576 |
| Floridablanca | 22.0% | 10.5% | 55.2% | 11.3% | 1.0% | 1916 |
| Fusagasugá | 24.6% | 12.7% | 49.5% | 12.1% | 1.1% | 1029 |
| Girardot | 21.7% | 12.6% | 44.8% | 16.9% | 4.1% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 23.9% | 13.1% | 50.5% | 12.0% | 0.6% | 1046 |
| Guainía | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 22.9% | 16.2% | 44.7% | 13.3% | 2.9% | 807 |
| Huila | 24.3% | 14.1% | 45.5% | 14.6% | 1.5% | 6495 |
| Ibagué | 22.9% | 12.4% | 51.8% | 11.4% | 1.5% | 3875 |
| Ipiales | 26.2% | 10.2% | 52.3% | 10.3% | 1.0% | 1060 |
| Itagüí | 24.4% | 13.5% | 48.8% | 11.1% | 2.2% | 1337 |
| Jamundí | 28.5% | 12.4% | 43.7% | 12.8% | 2.6% | 814 |
| La Guajira | 18.9% | 16.8% | 45.9% | 14.9% | 3.5% | 3167 |
| Lorica | 17.5% | 17.4% | 44.9% | 16.9% | 3.3% | 1210 |
| Magangué | 22.6% | 20.1% | 34.3% | 18.4% | 4.5% | 1322 |
| Magdalena | 18.5% | 18.0% | 42.0% | 15.4% | 6.1% | 6777 |
| Maicao | 21.0% | 17.7% | 40.3% | 16.2% | 4.8% | 1599 |
| Malambo | 16.0% | 17.1% | 50.0% | 13.5% | 3.4% | 1034 |
| Manizales | 23.0% | 11.1% | 53.4% | 11.2% | 1.3% | 2465 |
| Medellín | 22.4% | 12.4% | 50.4% | 12.2% | 2.6% | 15391 |
| Meta | 23.5% | 13.0% | 45.7% | 14.9% | 3.0% | 4323 |
| Montería | 22.9% | 17.8% | 40.2% | 15.1% | 4.0% | 3814 |
| Mosquera | 25.9% | 10.7% | 51.5% | 10.7% | 1.3% | 854 |
| Nariño | 20.1% | 12.1% | 53.4% | 11.9% | 2.6% | 7668 |
| Neiva | 24.6% | 14.4% | 44.5% | 14.7% | 1.8% | 2915 |
| Norte de Santander | 20.5% | 12.9% | 52.0% | 13.2% | 1.4% | 6070 |
| Palmira | 28.7% | 10.0% | 48.0% | 11.6% | 1.7% | 2029 |
| Pasto | 26.8% | 10.9% | 50.6% | 10.5% | 1.2% | 3138 |
| Pereira | 24.6% | 11.8% | 48.8% | 12.5% | 2.4% | 3306 |
| Piedecuesta | 21.1% | 10.7% | 55.8% | 10.4% | 2.0% | 1128 |
| Pitalito | 25.8% | 11.7% | 46.8% | 13.6% | 2.0% | 1277 |
| Popayán | 27.5% | 11.7% | 48.2% | 10.9% | 1.8% | 2112 |
| Putumayo | 25.2% | 15.2% | 42.9% | 14.9% | 1.9% | 3178 |
| Quibdó | 18.5% | 18.2% | 43.7% | 14.2% | 5.4% | 1102 |
| Quindío | 24.2% | 13.5% | 46.1% | 13.9% | 2.3% | 2048 |
| Riohacha | 20.3% | 16.8% | 43.6% | 15.7% | 3.7% | 2025 |
| Rionegro | 23.1% | 11.9% | 53.4% | 10.6% | 1.0% | 813 |
| Risaralda | 23.0% | 13.7% | 47.2% | 14.2% | 1.8% | 2286 |
| Sabaneta | 23.1% | 6.4% | 63.8% | 6.4% | 0.3% | 329 |
| Sahagún | 21.4% | 17.3% | 42.0% | 17.1% | 2.3% | 997 |
| San Andrés | 28.0% | 20.3% | 34.9% | 14.4% | 2.4% | 418 |
| Santa Marta | 22.6% | 13.9% | 45.4% | 14.7% | 3.4% | 4045 |
| Santander | 21.0% | 12.1% | 53.5% | 12.3% | 1.1% | 6363 |

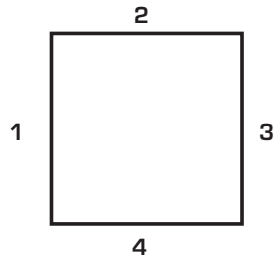
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 21.8% | 14.9% | 47.2% | 13.7% | 2.4% | 2578 |
| Soacha | 25.3% | 11.2% | 50.4% | 11.4% | 1.7% | 4048 |
| Sogamoso | 24.5% | 9.4% | 55.8% | 9.8% | 0.5% | 1119 |
| Soledad | 19.9% | 12.4% | 51.6% | 13.9% | 2.2% | 3865 |
| Sucre | 20.1% | 19.6% | 38.9% | 17.8% | 3.5% | 6080 |
| Tolima | 21.5% | 15.8% | 46.1% | 14.4% | 2.3% | 7517 |
| Tuluá | 24.8% | 10.9% | 51.0% | 11.7% | 1.6% | 1638 |
| Tumaco | 18.7% | 19.3% | 41.1% | 14.0% | 6.8% | 2161 |
| Tunja | 22.4% | 8.9% | 58.2% | 9.8% | 0.9% | 1288 |
| Turbo | 22.3% | 18.4% | 38.3% | 16.6% | 4.4% | 1473 |
| Uribia | 20.2% | 18.5% | 40.3% | 13.0% | 8.0% | 729 |
| Valle del Cauca | 24.8% | 13.3% | 44.9% | 14.2% | 2.7% | 6460 |
| Valledupar | 22.1% | 14.2% | 46.3% | 13.4% | 4.0% | 3519 |
| Vaupés | 16.7% | 16.7% | 16.7% | 0.0% | 50.0% | 6 |
| Vichada | 25.4% | 13.8% | 39.6% | 18.2% | 2.9% | 543 |
| Villavicencio | 24.1% | 11.6% | 50.2% | 12.6% | 1.5% | 4133 |
| Yopal | 26.2% | 13.8% | 45.8% | 12.3% | 1.9% | 1346 |
| Yumbo | 28.8% | 14.7% | 40.6% | 15.0% | 0.9% | 933 |
| Zipaquirá | 24.2% | 10.8% | 51.7% | 12.1% | 1.2% | 987 |
| Colombia | 22.7% | 13.5% | 48.1% | 13.1% | 2.7% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 7.

Observa los lados 1, 2, 3 y 4 del cuadrado.




¿Qué lados son paralelos entre sí?

A. El 1 y el 2.
B. El 1 y el 3.
C. El 2 y el 3.
D. El 3 y el 4.

## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Establecer conjeturas que se aproximen a las nociones de paralelismo y perpendicularidad en figuras planas. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | B |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 14.0% | 43.8% | 15.6% | 22.6% | 4.0% | 800 |
| Antioquia | 13.3% | 53.4% | 12.3% | 18.1% | 2.9% | 22994 |
| Apartadó | 13.8% | 48.8% | 14.6% | 19.0% | 3.8% | 1357 |
| Arauca | 12.2% | 53.7% | 13.1% | 18.6% | 2.3% | 2079 |
| Armenia | 15.1% | 55.0% | 11.8% | 16.4% | 1.7% | 1916 |
| Atlántico | 11.3% | 51.1% | 12.6% | 20.0% | 5.1% | 4466 |
| Barrancabermeja | 13.5% | 55.1% | 12.8% | 15.6% | 3.0% | 1795 |
| Barranquilla | 12.2% | 55.7% | 12.7% | 16.3% | 3.2% | 7802 |
| Bello | 14.5% | 56.4% | 11.4% | 15.8% | 1.9% | 2933 |
| Bogotá, D.C. | 13.0% | 59.9% | 10.8% | 13.3% | 3.0% | 47935 |
| Bolívar | 13.0% | 41.1% | 15.9% | 24.5% | 5.4% | 8299 |
| Boyacá | 12.2% | 52.9% | 13.3% | 19.5% | 2.0% | 6891 |
| Bucaramanga | 12.7% | 61.0% | 9.9% | 14.5% | 1.9% | 3829 |
| Buenaventura | 11.4% | 55.2% | 13.2% | 17.2% | 3.0% | 2848 |
| Buga | 13.1% | 59.6% | 10.2% | 12.4% | 4.6% | 822 |
| Caldas | 12.6% | 56.5% | 11.9% | 17.0% | 2.0% | 4507 |
| Cali | 12.7% | 60.2% | 10.6% | 13.5% | 3.0% | 14472 |
| Caquetá | 13.3% | 54.8% | 11.7% | 17.9% | 2.3% | 2765 |
| Cartagena | 12.3% | 56.4% | 11.1% | 16.4% | 3.7% | 8117 |
| Cartago | 15.1% | 55.9% | 11.9% | 14.1% | 3.1% | 810 |
| Casanare | 14.4% | 48.3% | 14.0% | 20.5% | 2.8% | 2226 |
| Cauca | 9.4% | 57.9% | 12.2% | 17.0% | 3.4% | 9633 |
| Cesar | 12.4% | 52.2% | 11.6% | 20.5% | 3.4% | 6653 |
| Chocó | 11.7% | 45.6% | 15.7% | 21.8% | 5.2% | 3467 |
| Chía | 12.5% | 64.8% | 8.9% | 12.1% | 1.7% | 961 |
| Ciénaga | 10.9% | 55.7% | 12.4% | 14.5% | 6.5% | 1145 |
| Cundinamarca | 12.1% | 58.3% | 11.6% | 16.2% | 1.8% | 11913 |
| Córdoba | 12.3% | 47.6% | 14.2% | 21.9% | 4.0% | 9883 |
| Cúcuta | 13.1% | 56.9% | 11.9% | 16.6% | 1.5% | 5554 |
| Dosquebradas | 13.0% | 55.1% | 12.2% | 16.9% | 2.8% | 1195 |
| Duitama | 12.6% | 61.5% | 12.2% | 13.2% | 0.6% | 1002 |
| Envigado | 13.5% | 64.1% | 8.5% | 12.4% | 1.4% | 989 |
| Facatativá | 13.8% | 56.3% | 11.3% | 14.1% | 4.5% | 1082 |
| Florencia | 11.9% | 53.4% | 12.6% | 19.5% | 2.7% | 1576 |
| Floridablanca | 12.3% | 63.7% | 10.8% | 12.2% | 1.0% | 1916 |
| Fusagasugá | 13.6% | 55.1% | 12.3% | 16.5% | 2.4% | 1029 |
| Girardot | 15.4% | 53.6% | 11.5% | 15.7% | 3.8% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 14.0% | 55.8% | 14.1% | 15.3% | 0.9% | 1046 |
| Guainía | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 14.4% | 45.6% | 15.1% | 20.9% | 4.0% | 807 |
| Huila | 12.1% | 55.0% | 12.1% | 19.0% | 1.8% | 6495 |
| Ibagué | 12.6% | 58.0% | 11.1% | 16.3% | 1.9% | 3875 |
| Ipiales | 10.3% | 60.7% | 12.7% | 14.8% | 1.5% | 1060 |
| Itagüí | 15.6% | 56.7% | 12.3% | 13.3% | 2.2% | 1337 |
| Jamundí | 14.0% | 50.6% | 13.5% | 19.5% | 2.3% | 814 |
| La Guajira | 10.6% | 51.4% | 13.4% | 20.1% | 4.5% | 3167 |
| Lorica | 12.3% | 48.8% | 16.0% | 19.4% | 3.5% | 1210 |
| Magangué | 13.5% | 40.5% | 15.9% | 25.9% | 4.2% | 1322 |
| Magdalena | 11.6% | 45.5% | 14.7% | 21.9% | 6.3% | 6777 |
| Maicao | 12.3% | 46.6% | 14.4% | 21.7% | 5.0% | 1599 |
| Malambo | 10.3% | 57.8% | 11.1% | 17.0% | 3.7% | 1034 |
| Manizales | 12.7% | 61.3% | 10.0% | 14.2% | 1.8% | 2465 |
| Medellín | 15.6% | 52.5% | 11.8% | 16.8% | 3.4% | 15391 |
| Meta | 12.5% | 50.7% | 14.6% | 18.9% | 3.3% | 4323 |
| Montería | 12.8% | 49.9% | 14.6% | 18.7% | 3.9% | 3814 |
| Mosquera | 11.7% | 63.7% | 10.7% | 13.1% | 0.8% | 854 |
| Nariño | 10.4% | 60.2% | 11.0% | 15.6% | 2.8% | 7668 |
| Neiva | 13.4% | 56.0% | 12.3% | 15.8% | 2.5% | 2915 |
| Norte de Santander | 11.5% | 58.2% | 11.5% | 16.8% | 2.0% | 6070 |
| Palmira | 12.1% | 62.4% | 10.7% | 12.9% | 1.9% | 2029 |
| Pasto | 12.8% | 60.0% | 10.6% | 14.9% | 1.7% | 3138 |
| Pereira | 14.7% | 56.5% | 11.3% | 14.8% | 2.7% | 3306 |
| Piedecuesta | 11.5% | 62.8% | 11.1% | 12.4% | 2.2% | 1128 |
| Pitalito | 13.9% | 54.7% | 12.7% | 16.6% | 2.1% | 1277 |
| Popayán | 13.4% | 60.1% | 11.2% | 12.9% | 2.4% | 2112 |
| Putumayo | 12.4% | 50.8% | 14.4% | 20.5% | 2.0% | 3178 |
| Quibdó | 13.3% | 52.9% | 12.8% | 16.2% | 4.7% | 1102 |
| Quindío | 13.4% | 51.4% | 11.8% | 19.8% | 3.6% | 2048 |
| Riohacha | 11.4% | 51.9% | 12.7% | 19.6% | 4.3% | 2025 |
| Rionegro | 14.3% | 58.3% | 9.7% | 16.5% | 1.2% | 813 |
| Risaralda | 13.7% | 53.2% | 11.2% | 19.3% | 2.6% | 2286 |
| Sabaneta | 11.6% | 61.1% | 10.9% | 15.2% | 1.2% | 329 |
| Sahagún | 11.6% | 51.2% | 14.7% | 19.7% | 2.8% | 997 |
| San Andrés | 11.7% | 48.6% | 15.6% | 20.6% | 3.6% | 418 |
| Santa Marta | 12.0% | 53.4% | 12.4% | 18.5% | 3.7% | 4045 |
| Santander | 11.3% | 59.7% | 11.0% | 16.8% | 1.2% | 6363 |

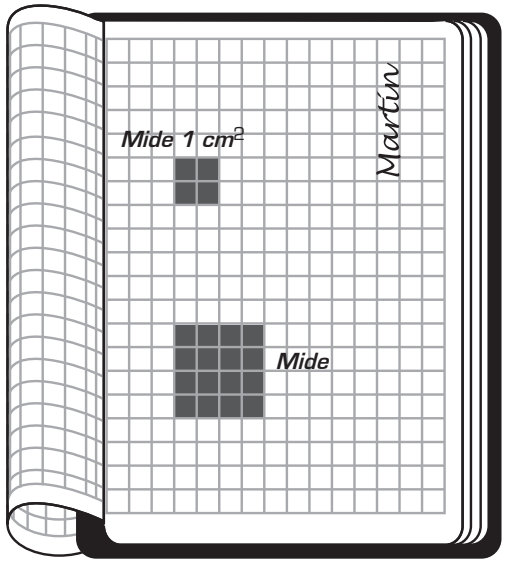
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 13.3% | 54.8% | 13.2% | 16.1% | 2.6% | 2578 |
| Soacha | 12.9% | 57.2% | 13.4% | 14.5% | 2.0% | 4048 |
| Sogamoso | 16.1% | 57.7% | 12.5% | 12.9% | 0.8% | 1119 |
| Soledad | 11.9% | 57.6% | 11.7% | 16.2% | 2.5% | 3865 |
| Sucre | 12.3% | 45.6% | 14.6% | 23.6% | 3.9% | 6080 |
| Tolima | 11.9% | 53.4% | 12.0% | 20.0% | 2.7% | 7517 |
| Tuluá | 12.8% | 59.6% | 11.7% | 14.0% | 2.0% | 1638 |
| Tumaco | 11.0% | 44.7% | 14.9% | 21.4% | 7.9% | 2161 |
| Tunja | 12.0% | 62.4% | 10.8% | 13.5% | 1.2% | 1288 |
| Turbo | 14.7% | 42.6% | 15.1% | 22.3% | 5.3% | 1473 |
| Uribia | 10.8% | 43.6% | 16.7% | 20.2% | 8.6% | 729 |
| Valle del Cauca | 13.4% | 52.9% | 12.2% | 18.5% | 3.0% | 6460 |
| Valledupar | 11.7% | 53.5% | 12.6% | 17.9% | 4.3% | 3519 |
| Vaupés | 0.0% | 33.3% | 16.7% | 0.0% | 50.0% | 6 |
| Vichada | 11.4% | 44.4% | 15.3% | 25.8% | 3.1% | 543 |
| Villavicencio | 14.1% | 58.6% | 11.2% | 14.4% | 1.8% | 4133 |
| Yopal | 12.8% | 51.9% | 14.6% | 17.8% | 2.8% | 1346 |
| Yumbo | 17.1% | 48.0% | 15.9% | 17.6% | 1.4% | 933 |
| Zipaquirá | 12.7% | 60.7% | 11.9% | 13.3% | 1.5% | 987 |
| Colombia | 12.7% | 55.0% | 12.2% | 17.1% | 3.0% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 8.

Este es el cuaderno de matemáticas de Martín.




¿Cuál es la medida del cuadrado más grande que dibujó Martín?

A. 1 $cm^2$.
B. 2 $cm^2$.
C. 4 $cm^2$.
D. 8 $cm^2$.

## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Desarrollar procesos de medición usando patrones e instrumentos estandarizados. |
| **Nivel de desempeño** | Avanzado |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 10.0% | 17.0% | 32.9% | 34.8% | 5.4% | 800 |
| Antioquia | 11.7% | 16.4% | 38.5% | 30.2% | 3.2% | 22994 |
| Apartadó | 13.0% | 14.7% | 40.2% | 28.4% | 3.7% | 1357 |
| Arauca | 11.9% | 15.9% | 40.3% | 29.3% | 2.6% | 2079 |
| Armenia | 12.7% | 18.3% | 41.5% | 25.9% | 1.6% | 1916 |
| Atlántico | 12.8% | 15.2% | 36.3% | 30.2% | 5.4% | 4466 |
| Barrancabermeja | 12.2% | 17.4% | 37.2% | 30.4% | 2.8% | 1795 |
| Barranquilla | 13.8% | 14.9% | 40.3% | 27.7% | 3.4% | 7802 |
| Bello | 10.5% | 15.7% | 43.0% | 29.3% | 1.6% | 2933 |
| Bogotá, D.C. | 8.3% | 18.2% | 47.0% | 23.6% | 3.0% | 47935 |
| Bolívar | 15.0% | 16.4% | 30.2% | 31.8% | 6.6% | 8299 |
| Boyacá | 12.1% | 19.4% | 36.0% | 30.5% | 1.9% | 6891 |
| Bucaramanga | 9.5% | 18.5% | 45.4% | 24.9% | 1.7% | 3829 |
| Buenaventura | 13.0% | 15.6% | 37.2% | 30.6% | 3.5% | 2848 |
| Buga | 10.7% | 16.5% | 42.3% | 26.3% | 4.1% | 822 |
| Caldas | 11.2% | 17.2% | 39.3% | 30.1% | 2.3% | 4507 |
| Cali | 10.8% | 17.0% | 44.2% | 25.0% | 3.0% | 14472 |
| Caquetá | 11.5% | 19.3% | 38.0% | 29.2% | 2.0% | 2765 |
| Cartagena | 11.9% | 14.6% | 42.9% | 26.2% | 4.3% | 8117 |
| Cartago | 11.9% | 16.3% | 42.2% | 27.2% | 2.5% | 810 |
| Casanare | 12.0% | 16.6% | 37.5% | 30.9% | 3.1% | 2226 |
| Cauca | 10.6% | 18.2% | 38.1% | 29.5% | 3.6% | 9633 |
| Cesar | 11.9% | 15.4% | 39.0% | 30.0% | 3.8% | 6653 |
| Chocó | 13.6% | 17.9% | 29.1% | 33.0% | 6.4% | 3467 |
| Chía | 9.8% | 20.5% | 46.1% | 21.7% | 1.9% | 961 |
| Ciénaga | 9.5% | 18.1% | 42.9% | 23.4% | 6.1% | 1145 |
| Cundinamarca | 10.2% | 18.7% | 43.4% | 25.8% | 1.9% | 11913 |
| Córdoba | 13.9% | 16.2% | 34.1% | 31.2% | 4.6% | 9883 |
| Cúcuta | 12.6% | 17.2% | 41.3% | 27.1% | 1.7% | 5554 |
| Dosquebradas | 12.5% | 15.7% | 41.4% | 26.9% | 3.5% | 1195 |
| Duitama | 7.1% | 20.6% | 49.2% | 22.6% | 0.6% | 1002 |
| Envigado | 6.6% | 17.1% | 49.7% | 25.2% | 1.4% | 989 |
| Facatativá | 9.4% | 18.0% | 41.4% | 26.7% | 4.4% | 1082 |
| Florencia | 14.0% | 19.9% | 35.2% | 27.9% | 3.1% | 1576 |
| Floridablanca | 9.0% | 21.1% | 45.4% | 23.2% | 1.4% | 1916 |
| Fusagasugá | 10.2% | 18.0% | 41.8% | 27.9% | 2.1% | 1029 |
| Girardot | 12.4% | 15.3% | 43.3% | 25.3% | 3.8% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 10.4% | 16.9% | 43.8% | 28.1% | 0.8% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 11.2% | 18.5% | 33.3% | 32.7% | 4.3% | 807 |
| Huila | 10.7% | 17.8% | 41.8% | 27.9% | 1.9% | 6495 |
| Ibagué | 11.2% | 17.2% | 45.5% | 23.6% | 2.4% | 3875 |
| Ipiales | 10.9% | 16.4% | 43.5% | 27.9% | 1.2% | 1060 |
| Itagüí | 11.1% | 15.6% | 44.1% | 26.8% | 2.5% | 1337 |
| Jamundí | 12.5% | 14.7% | 41.2% | 29.9% | 1.7% | 814 |
| La Guajira | 12.8% | 17.0% | 39.4% | 26.2% | 4.6% | 3167 |
| Lorica | 14.3% | 15.6% | 34.4% | 31.2% | 4.5% | 1210 |
| Magangué | 17.0% | 14.8% | 29.1% | 34.1% | 4.9% | 1322 |
| Magdalena | 13.2% | 14.9% | 35.6% | 29.3% | 6.9% | 6777 |
| Maicao | 13.8% | 16.8% | 35.5% | 28.3% | 5.6% | 1599 |
| Malambo | 12.0% | 13.5% | 47.6% | 22.5% | 4.4% | 1034 |
| Manizales | 9.1% | 17.2% | 44.6% | 27.7% | 1.3% | 2465 |
| Medellín | 11.5% | 15.3% | 40.8% | 29.1% | 3.4% | 15391 |
| Meta | 13.6% | 17.8% | 36.8% | 28.5% | 3.2% | 4323 |
| Montería | 14.9% | 16.6% | 32.8% | 31.5% | 4.2% | 3814 |
| Mosquera | 7.5% | 15.3% | 48.9% | 26.7% | 1.5% | 854 |
| Nariño | 11.0% | 18.6% | 40.2% | 27.3% | 2.8% | 7668 |
| Neiva | 12.3% | 16.8% | 42.0% | 26.8% | 2.1% | 2915 |
| Norte de Santander | 12.3% | 17.4% | 40.7% | 28.0% | 1.6% | 6070 |
| Palmira | 9.2% | 16.1% | 45.2% | 27.5% | 2.1% | 2029 |
| Pasto | 9.4% | 18.6% | 47.8% | 22.5% | 1.7% | 3138 |
| Pereira | 10.5% | 17.2% | 40.8% | 28.8% | 2.8% | 3306 |
| Piedecuesta | 8.7% | 18.8% | 45.4% | 25.2% | 2.0% | 1128 |
| Pitalito | 10.0% | 17.6% | 41.4% | 28.7% | 2.2% | 1277 |
| Popayán | 10.5% | 18.0% | 44.2% | 25.2% | 2.1% | 2112 |
| Putumayo | 12.2% | 18.0% | 36.8% | 30.6% | 2.4% | 3178 |
| Quibdó | 13.4% | 12.3% | 38.3% | 30.7% | 5.3% | 1102 |
| Quindío | 11.8% | 15.8% | 41.9% | 27.4% | 3.1% | 2048 |
| Riohacha | 14.0% | 14.3% | 38.1% | 28.8% | 4.7% | 2025 |
| Rionegro | 9.5% | 16.5% | 44.5% | 28.4% | 1.1% | 813 |
| Risaralda | 10.6% | 17.5% | 38.7% | 31.0% | 2.2% | 2286 |
| Sabaneta | 10.6% | 19.8% | 48.3% | 20.7% | 0.6% | 329 |
| Sahagún | 13.4% | 14.9% | 34.9% | 33.4% | 3.3% | 997 |
| San Andrés | 14.6% | 17.2% | 36.1% | 29.9% | 2.2% | 418 |
| Santa Marta | 12.2% | 15.1% | 37.9% | 30.6% | 4.2% | 4045 |
| Santander | 10.6% | 19.4% | 42.2% | 26.5% | 1.3% | 6363 |

Continúa en la siguiente página

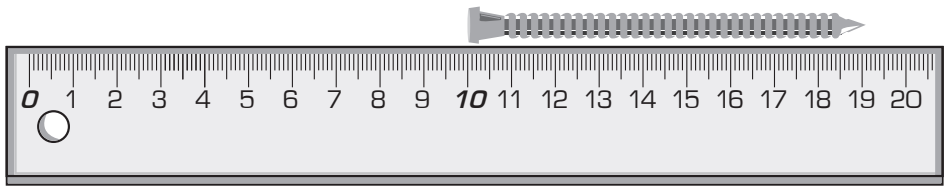
| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 14.5% | 14.9% | 42.3% | 25.6% | 2.6% | 2578 |
| Soacha | 10.5% | 17.4% | 44.3% | 25.6% | 2.2% | 4048 |
| Sogamoso | 8.4% | 19.8% | 45.9% | 25.6% | 0.3% | 1119 |
| Soledad | 12.4% | 14.7% | 42.9% | 27.4% | 2.5% | 3865 |
| Sucre | 13.7% | 16.0% | 33.8% | 31.6% | 4.9% | 6080 |
| Tolima | 11.8% | 15.4% | 40.8% | 29.4% | 2.6% | 7517 |
| Tuluá | 11.9% | 17.2% | 42.8% | 26.2% | 2.0% | 1638 |
| Tumaco | 14.3% | 16.4% | 32.7% | 27.2% | 9.4% | 2161 |
| Tunja | 9.3% | 19.3% | 46.4% | 23.9% | 1.2% | 1288 |
| Turbo | 16.8% | 16.2% | 31.5% | 30.0% | 5.6% | 1473 |
| Uribia | 14.8% | 18.1% | 31.6% | 27.2% | 8.4% | 729 |
| Valle del Cauca | 12.3% | 16.6% | 39.9% | 28.2% | 3.1% | 6460 |
| Valledupar | 11.8% | 13.5% | 39.1% | 30.9% | 4.7% | 3519 |
| Vaupés | 0.0% | 0.0% | 16.7% | 33.3% | 50.0% | 6 |
| Vichada | 12.2% | 14.9% | 32.2% | 37.2% | 3.5% | 543 |
| Villavicencio | 11.0% | 17.1% | 46.1% | 24.1% | 1.9% | 4133 |
| Yopal | 10.1% | 17.8% | 43.7% | 25.4% | 3.0% | 1346 |
| Yumbo | 13.5% | 15.9% | 37.5% | 30.4% | 2.7% | 933 |
| Zipaquirá | 10.5% | 18.8% | 49.1% | 19.7% | 1.8% | 987 |
| Colombia | 11.4% | 17.0% | 40.8% | 27.7% | 3.2% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

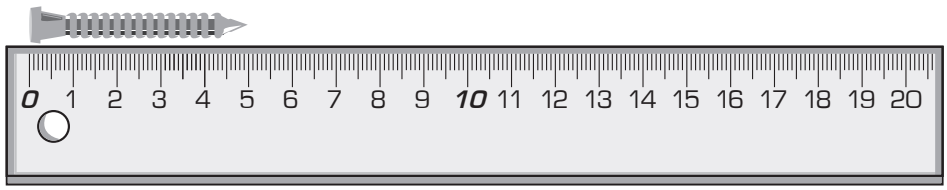
- **Pregunta 9.**

¿Cuál de estos tornillos le sirve al mecánico?

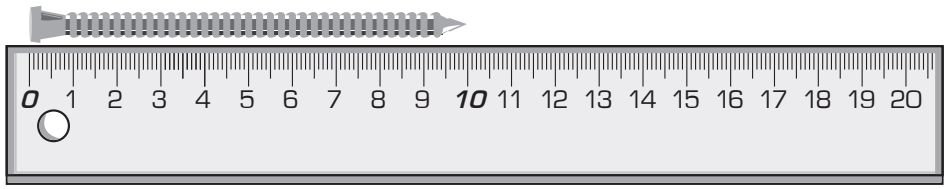
A.



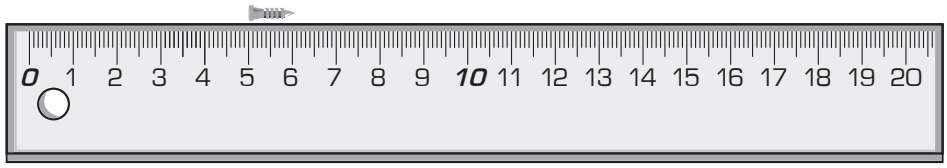

B.




C.




D.



## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Desarrollar procesos de medición usando patrones e instrumentos estandarizados. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 17.1% | 11.1% | 55.4% | 11.4% | 5.0% | 800 |
| Antioquia | 17.9% | 8.8% | 60.1% | 9.9% | 3.2% | 22994 |
| Apartadó | 16.9% | 11.1% | 53.3% | 14.6% | 4.1% | 1357 |
| Arauca | 17.1% | 7.8% | 61.8% | 10.8% | 2.5% | 2079 |
| Armenia | 19.7% | 8.0% | 61.4% | 9.6% | 1.4% | 1916 |
| Atlántico | 15.5% | 9.5% | 58.6% | 11.1% | 5.3% | 4466 |
| Barrancabermeja | 19.3% | 6.4% | 61.8% | 9.4% | 3.1% | 1795 |
| Barranquilla | 17.9% | 7.0% | 62.5% | 9.3% | 3.4% | 7802 |
| Bello | 20.1% | 6.4% | 64.2% | 7.5% | 1.7% | 2933 |
| Bogotá, D.C. | 17.8% | 5.8% | 66.0% | 7.4% | 3.0% | 47935 |
| Bolívar | 20.0% | 11.6% | 47.8% | 14.0% | 6.7% | 8299 |
| Boyacá | 18.5% | 8.7% | 60.4% | 10.4% | 2.0% | 6891 |
| Bucaramanga | 17.0% | 6.4% | 67.3% | 7.7% | 1.7% | 3829 |
| Buenaventura | 15.2% | 7.8% | 60.5% | 13.3% | 3.2% | 2848 |
| Buga | 14.7% | 7.1% | 65.7% | 8.9% | 3.6% | 822 |
| Caldas | 15.5% | 8.7% | 64.1% | 9.5% | 2.3% | 4507 |
| Cali | 17.8% | 6.1% | 65.2% | 8.3% | 2.6% | 14472 |
| Caquetá | 15.2% | 8.2% | 62.8% | 12.0% | 1.9% | 2765 |
| Cartagena | 16.8% | 7.9% | 61.3% | 9.8% | 4.2% | 8117 |
| Cartago | 19.1% | 8.3% | 62.1% | 8.1% | 2.3% | 810 |
| Casanare | 17.6% | 8.9% | 60.5% | 9.7% | 3.3% | 2226 |
| Cauca | 14.8% | 7.7% | 63.4% | 10.4% | 3.7% | 9633 |
| Cesar | 15.2% | 8.5% | 61.1% | 11.6% | 3.5% | 6653 |
| Chocó | 16.6% | 11.7% | 49.7% | 15.4% | 6.6% | 3467 |
| Chía | 16.8% | 4.4% | 69.2% | 8.3% | 1.4% | 961 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Ciénaga | 11.6% | 9.2% | 61.9% | 12.1% | 5.2% | 1145 |
| Cundinamarca | 17.2% | 6.4% | 65.4% | 8.9% | 2.1% | 11913 |
| Córdoba | 18.4% | 10.2% | 53.9% | 13.3% | 4.2% | 9883 |
| Cúcuta | 18.0% | 7.8% | 62.3% | 9.9% | 2.0% | 5554 |
| Dosquebradas | 18.4% | 6.4% | 63.3% | 8.8% | 3.1% | 1195 |
| Duitama | 16.1% | 6.1% | 68.7% | 8.7% | 0.5% | 1002 |
| Envigado | 18.8% | 6.5% | 65.1% | 8.6% | 1.0% | 989 |
| Facatativá | 16.0% | 5.6% | 64.2% | 9.8% | 4.3% | 1082 |
| Florencia | 18.0% | 6.5% | 61.7% | 10.5% | 3.2% | 1576 |
| Floridablanca | 18.0% | 6.4% | 66.9% | 7.2% | 1.6% | 1916 |
| Fusagasugá | 20.1% | 6.4% | 62.5% | 9.2% | 1.7% | 1029 |
| Girardot | 16.6% | 9.7% | 60.5% | 8.7% | 4.5% | 688 |
| Girón | 20.2% | 6.5% | 62.4% | 10.3% | 0.6% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 1 |
| Guaviare | 18.5% | 8.9% | 56.9% | 11.9% | 3.8% | 807 |
| Huila | 16.6% | 8.1% | 64.2% | 9.4% | 1.8% | 6495 |
| Ibagué | 17.7% | 6.6% | 65.3% | 8.0% | 2.4% | 3875 |
| Ipiales | 16.0% | 5.8% | 70.2% | 6.9% | 1.0% | 1060 |
| Itagüí | 20.9% | 7.7% | 59.7% | 9.2% | 2.5% | 1337 |
| Jamundí | 21.6% | 7.7% | 57.0% | 10.8% | 2.8% | 814 |
| La Guajira | 15.6% | 10.6% | 57.6% | 11.7% | 4.5% | 3167 |
| Lorica | 18.8% | 11.9% | 52.1% | 14.1% | 3.1% | 1210 |
| Magangué | 21.9% | 13.6% | 46.5% | 13.6% | 4.4% | 1322 |
| Magdalena | 16.2% | 10.3% | 53.5% | 12.9% | 7.1% | 6777 |
| Maicao | 16.9% | 12.3% | 54.7% | 10.9% | 5.1% | 1599 |
| Malambo | 15.7% | 8.5% | 61.3% | 9.9% | 4.6% | 1034 |
| Manizales | 18.2% | 6.1% | 65.2% | 8.8% | 1.7% | 2465 |
| Medellín | 20.0% | 7.5% | 60.5% | 8.6% | 3.4% | 15391 |
| Meta | 18.3% | 7.9% | 59.9% | 10.6% | 3.3% | 4323 |
| Montería | 18.9% | 9.2% | 55.2% | 12.2% | 4.6% | 3814 |
| Mosquera | 17.0% | 4.2% | 70.0% | 7.7% | 1.1% | 854 |
| Nariño | 14.7% | 7.5% | 64.7% | 9.9% | 3.2% | 7668 |
| Neiva | 18.1% | 8.5% | 62.2% | 8.8% | 2.4% | 2915 |
| Norte de Santander | 15.2% | 7.2% | 66.3% | 9.7% | 1.7% | 6070 |
| Palmira | 16.7% | 6.1% | 66.4% | 8.9% | 1.9% | 2029 |
| Pasto | 17.6% | 7.1% | 65.9% | 8.1% | 1.3% | 3138 |
| Pereira | 18.1% | 6.7% | 64.7% | 8.0% | 2.5% | 3306 |
| Piedecuesta | 15.1% | 5.7% | 68.9% | 8.2% | 2.1% | 1128 |
| Pitalito | 16.5% | 7.7% | 64.2% | 9.8% | 1.8% | 1277 |

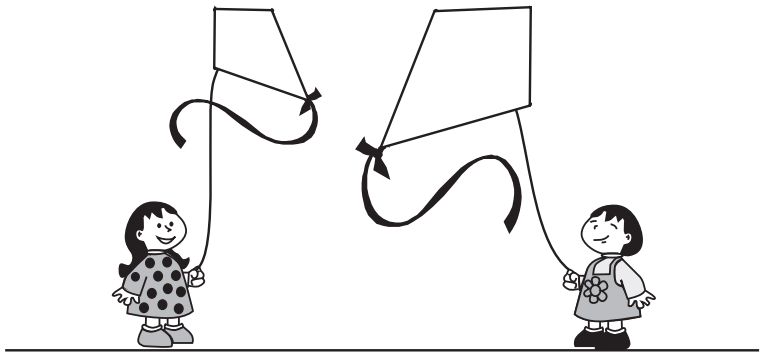
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Popayán | 17.4% | 6.2% | 66.3% | 8.0% | 2.2% | 2112 |
| Putumayo | 18.0% | 9.2% | 58.9% | 11.6% | 2.3% | 3178 |
| Quibdó | 19.2% | 9.3% | 55.2% | 10.7% | 5.6% | 1102 |
| Quindío | 17.6% | 7.9% | 63.0% | 7.9% | 3.5% | 2048 |
| Riohacha | 17.8% | 9.0% | 58.4% | 10.7% | 4.1% | 2025 |
| Rionegro | 19.9% | 6.5% | 63.3% | 8.9% | 1.4% | 813 |
| Risaralda | 17.9% | 8.0% | 61.2% | 10.1% | 2.8% | 2286 |
| Sabaneta | 18.8% | 5.2% | 67.8% | 7.9% | 0.3% | 329 |
| Sahagún | 17.2% | 11.0% | 56.9% | 11.7% | 3.2% | 997 |
| San Andrés | 17.5% | 9.6% | 60.5% | 9.6% | 2.9% | 418 |
| Santa Marta | 17.8% | 7.6% | 59.9% | 10.6% | 4.2% | 4045 |
| Santander | 15.5% | 6.7% | 67.3% | 9.3% | 1.2% | 6363 |
| Sincelejo | 16.6% | 9.2% | 60.3% | 10.9% | 3.1% | 2578 |
| Soacha | 19.4% | 5.7% | 66.3% | 6.9% | 1.7% | 4048 |
| Sogamoso | 18.5% | 6.3% | 65.6% | 8.6% | 1.1% | 1119 |
| Soledad | 17.1% | 7.3% | 64.1% | 9.4% | 2.0% | 3865 |
| Sucre | 18.3% | 11.1% | 52.5% | 13.6% | 4.6% | 6080 |
| Tolima | 17.3% | 8.7% | 61.3% | 10.0% | 2.7% | 7517 |
| Tuluá | 17.5% | 6.2% | 65.8% | 8.2% | 2.3% | 1638 |
| Tumaco | 16.9% | 10.7% | 48.2% | 15.3% | 8.9% | 2161 |
| Tunja | 15.8% | 6.3% | 66.9% | 9.8% | 1.2% | 1288 |
| Turbo | 17.4% | 11.6% | 50.3% | 15.6% | 5.1% | 1473 |
| Uribia | 14.1% | 12.8% | 51.0% | 13.4% | 8.6% | 729 |
| Valle del Cauca | 19.1% | 7.7% | 60.8% | 9.4% | 3.1% | 6460 |
| Valledupar | 15.1% | 6.5% | 64.2% | 9.7% | 4.5% | 3519 |
| Vaupés | 33.3% | 0.0% | 16.7% | 0.0% | 50.0% | 6 |
| Vichada | 14.5% | 9.8% | 59.7% | 13.1% | 2.9% | 543 |
| Villavicencio | 16.9% | 6.2% | 65.9% | 9.1% | 1.8% | 4133 |
| Yopal | 18.6% | 8.2% | 60.7% | 10.2% | 2.4% | 1346 |
| Yumbo | 20.9% | 7.6% | 58.4% | 10.4% | 2.7% | 933 |
| Zipaquirá | 16.5% | 5.3% | 69.8% | 6.8% | 1.6% | 987 |
| Colombia | 17.5% | 7.8% | 61.8% | 9.8% | 3.2% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 10.

Dos niñas están elevando cometas en el parque.



¿Se parecen las cometas?

A. Sí, porque tienen la misma forma y el mismo tamaño.
B. No, porque una tiene forma diferente de la otra.
C. Sí, porque tienen la misma forma pero diferente tamaño.
D. No, porque una tiene menos lados que la otra.

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Describir características de figuras que son semejantes o congruentes entre sí. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 11.6% | 14.5% | 56.0% | 14.0% | 3.9% | 800 |
| Antioquia | 9.6% | 14.3% | 63.5% | 10.0% | 2.6% | 22994 |
| Apartadó | 11.1% | 15.9% | 58.9% | 10.4% | 3.7% | 1357 |
| Arauca | 8.7% | 15.0% | 65.4% | 9.1% | 1.9% | 2079 |
| Armenia | 9.1% | 15.6% | 66.2% | 8.2% | 0.9% | 1916 |
| Atlántico | 12.1% | 13.7% | 58.4% | 11.6% | 4.2% | 4466 |
| Barrancabermeja | 9.1% | 14.7% | 65.6% | 8.2% | 2.4% | 1795 |
| Barranquilla | 9.1% | 13.8% | 65.0% | 9.3% | 2.7% | 7802 |
| Bello | 7.5% | 13.9% | 71.0% | 6.2% | 1.4% | 2933 |
| Bogotá, D.C. | 5.6% | 13.6% | 72.5% | 5.5% | 2.8% | 47935 |
| Bolívar | 15.8% | 16.6% | 45.6% | 16.4% | 5.6% | 8299 |
| Boyacá | 10.7% | 16.8% | 60.7% | 10.2% | 1.6% | 6891 |
| Bucaramanga | 5.4% | 14.0% | 73.2% | 6.0% | 1.4% | 3829 |
| Buenaventura | 10.0% | 12.8% | 62.7% | 12.1% | 2.2% | 2848 |
| Buga | 5.7% | 10.3% | 73.4% | 6.7% | 3.9% | 822 |
| Caldas | 7.9% | 15.6% | 66.3% | 8.5% | 1.6% | 4507 |
| Cali | 6.8% | 12.4% | 72.1% | 6.2% | 2.4% | 14472 |
| Caquetá | 13.3% | 13.5% | 59.1% | 12.4% | 1.7% | 2765 |
| Cartagena | 10.0% | 13.7% | 63.2% | 9.7% | 3.5% | 8117 |
| Cartago | 7.7% | 15.7% | 67.4% | 6.9% | 2.3% | 810 |
| Casanare | 11.3% | 16.8% | 58.2% | 11.4% | 2.3% | 2226 |
| Cauca | 10.3% | 13.2% | 61.1% | 12.4% | 3.0% | 9633 |
| Cesar | 10.4% | 13.5% | 61.5% | 11.7% | 2.9% | 6653 |
| Chocó | 15.3% | 15.1% | 46.3% | 18.2% | 5.0% | 3467 |
| Chía | 6.3% | 12.4% | 73.9% | 6.1% | 1.2% | 961 |
| Ciénaga | 9.3% | 12.1% | 63.5% | 9.7% | 5.4% | 1145 |
| Cundinamarca | 6.8% | 14.3% | 69.7% | 7.4% | 1.7% | 11913 |
| Córdoba | 13.6% | 16.1% | 51.6% | 15.3% | 3.4% | 9883 |
| Cúcuta | 8.1% | 15.8% | 66.2% | 8.6% | 1.3% | 5554 |
| Dosquebradas | 7.2% | 15.0% | 68.1% | 6.6% | 3.1% | 1195 |
| Duitama | 4.7% | 15.2% | 76.2% | 3.6% | 0.3% | 1002 |
| Envigado | 3.0% | 13.2% | 79.0% | 3.5% | 1.2% | 989 |
| Facatativá | 5.5% | 16.0% | 68.3% | 6.0% | 4.2% | 1082 |
| Florencia | 10.0% | 16.4% | 59.8% | 11.1% | 2.6% | 1576 |
| Floridablanca | 5.6% | 13.9% | 73.9% | 5.4% | 1.2% | 1916 |
| Fusagasugá | 6.6% | 15.4% | 71.2% | 5.5% | 1.3% | 1029 |
| Girardot | 9.0% | 16.7% | 60.5% | 9.7% | 4.1% | 688 |

Continúa en la siguiente página

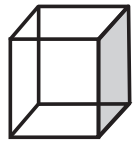
| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 5.9% | 13.9% | 71.4% | 8.1% | 0.7% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 12.4% | 14.1% | 57.5% | 12.8% | 3.2% | 807 |
| Huila | 9.3% | 15.1% | 63.2% | 10.9% | 1.5% | 6495 |
| Ibagué | 6.8% | 15.4% | 69.2% | 6.9% | 1.8% | 3875 |
| Ipiales | 5.5% | 14.2% | 72.0% | 7.4% | 0.9% | 1060 |
| Itagüí | 8.5% | 15.3% | 69.0% | 5.2% | 2.0% | 1337 |
| Jamundí | 8.6% | 13.5% | 67.2% | 8.8% | 1.8% | 814 |
| La Guajira | 11.1% | 14.2% | 57.6% | 13.7% | 3.4% | 3167 |
| Lorica | 15.1% | 15.7% | 52.6% | 14.5% | 2.1% | 1210 |
| Magangué | 16.0% | 18.3% | 47.6% | 14.1% | 4.1% | 1322 |
| Magdalena | 14.2% | 13.4% | 52.2% | 14.8% | 5.4% | 6777 |
| Maicao | 13.4% | 16.0% | 50.5% | 15.6% | 4.5% | 1599 |
| Malambo | 10.0% | 11.9% | 64.7% | 9.8% | 3.7% | 1034 |
| Manizales | 6.5% | 16.1% | 69.9% | 6.2% | 1.3% | 2465 |
| Medellín | 8.0% | 15.1% | 67.3% | 6.5% | 3.0% | 15391 |
| Meta | 10.5% | 15.0% | 61.7% | 10.2% | 2.7% | 4323 |
| Montería | 12.1% | 16.1% | 55.9% | 12.2% | 3.8% | 3814 |
| Mosquera | 5.5% | 14.8% | 73.4% | 5.2% | 1.2% | 854 |
| Nariño | 7.8% | 12.4% | 67.4% | 9.9% | 2.5% | 7668 |
| Neiva | 9.2% | 15.0% | 65.5% | 8.8% | 1.5% | 2915 |
| Norte de Santander | 9.4% | 14.1% | 65.7% | 9.6% | 1.2% | 6070 |
| Palmira | 5.8% | 13.0% | 73.2% | 6.6% | 1.4% | 2029 |
| Pasto | 7.3% | 14.2% | 71.0% | 6.3% | 1.1% | 3138 |
| Pereira | 7.2% | 15.5% | 68.1% | 7.0% | 2.2% | 3306 |
| Piedecuesta | 5.7% | 14.0% | 72.1% | 6.5% | 1.8% | 1128 |
| Pitalito | 11.4% | 13.3% | 65.5% | 8.8% | 1.1% | 1277 |
| Popayán | 6.4% | 14.4% | 70.5% | 7.2% | 1.4% | 2112 |
| Putumayo | 11.9% | 15.2% | 59.8% | 11.3% | 1.8% | 3178 |
| Quibdó | 12.3% | 16.4% | 56.3% | 11.6% | 3.4% | 1102 |
| Quindío | 7.5% | 15.4% | 64.7% | 9.4% | 3.0% | 2048 |
| Riohacha | 12.3% | 14.5% | 58.3% | 11.7% | 3.2% | 2025 |
| Rionegro | 6.6% | 16.7% | 69.0% | 7.0% | 0.6% | 813 |
| Risaralda | 9.2% | 14.0% | 64.9% | 10.1% | 1.7% | 2286 |
| Sabaneta | 4.3% | 17.3% | 74.8% | 3.3% | 0.3% | 329 |
| Sahagún | 10.7% | 16.0% | 59.0% | 11.6% | 2.6% | 997 |
| San Andrés | 15.8% | 14.8% | 56.5% | 11.2% | 1.7% | 418 |
| Santa Marta | 9.8% | 15.3% | 61.3% | 10.1% | 3.5% | 4045 |
| Santander | 7.3% | 13.5% | 69.3% | 8.8% | 1.1% | 6363 |

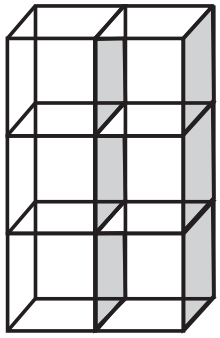
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 9.6% | 15.0% | 63.1% | 10.0% | 2.2% | 2578 |
| Soacha | 7.0% | 15.3% | 70.1% | 6.0% | 1.6% | 4048 |
| Sogamoso | 5.6% | 15.2% | 72.5% | 6.2% | 0.5% | 1119 |
| Soledad | 8.6% | 14.3% | 65.7% | 9.5% | 1.9% | 3865 |
| Sucre | 14.6% | 16.4% | 50.1% | 15.6% | 3.4% | 6080 |
| Tolima | 10.9% | 15.9% | 59.4% | 11.6% | 2.3% | 7517 |
| Tuluá | 7.3% | 13.1% | 72.0% | 6.2% | 1.5% | 1638 |
| Tumaco | 15.1% | 15.9% | 48.4% | 13.0% | 7.5% | 2161 |
| Tunja | 6.3% | 14.4% | 72.9% | 5.5% | 0.9% | 1288 |
| Turbo | 15.6% | 18.0% | 47.2% | 14.5% | 4.7% | 1473 |
| Uribia | 14.8% | 15.0% | 44.9% | 17.6% | 7.8% | 729 |
| Valle del Cauca | 8.4% | 13.0% | 66.6% | 9.6% | 2.4% | 6460 |
| Valledupar | 8.9% | 13.7% | 62.4% | 11.4% | 3.5% | 3519 |
| Vaupés | 16.7% | 0.0% | 33.3% | 0.0% | 50.0% | 6 |
| Vichada | 11.8% | 12.2% | 57.6% | 15.8% | 2.6% | 543 |
| Villavicencio | 6.9% | 14.6% | 69.9% | 6.9% | 1.7% | 4133 |
| Yopal | 8.8% | 13.8% | 66.2% | 8.8% | 2.4% | 1346 |
| Yumbo | 8.7% | 12.3% | 70.7% | 6.3% | 1.9% | 933 |
| Zipaquirá | 5.0% | 13.5% | 73.7% | 6.6% | 1.3% | 987 |
| Colombia | 9.0% | 14.4% | 64.6% | 9.3% | 2.6% | 369410 |

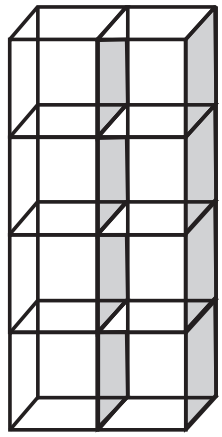
*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 11.

Las torres 1 y 2 se construyeron con cubos como este 



Torre 1



Torre 2

Comparando las dos torres, es correcto afirmar que

A. la torre 2 ocupa más espacio que la 1.
B. las dos torres tienen igual tamaño.
C. la torre 1 ocupa más espacio que la 2.
D. las dos torres tienen diferente forma.

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Identificar atributos de objetos y eventos que son susceptibles de ser medidos. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

- **Resultados a nivel de Entidad Territorial certificada (ETC)**

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 38.3% | 14.8% | 15.1% | 27.3% | 4.6% | 800 |
| Antioquia | 52.9% | 8.4% | 12.2% | 23.5% | 3.0% | 22994 |
| Apartadó | 49.1% | 9.7% | 13.1% | 23.4% | 4.8% | 1357 |
| Arauca | 51.4% | 8.7% | 12.4% | 25.2% | 2.4% | 2079 |
| Armenia | 52.3% | 9.5% | 11.6% | 25.5% | 1.1% | 1916 |
| Atlántico | 48.4% | 10.9% | 15.8% | 20.0% | 5.0% | 4466 |
| Barrancabermeja | 52.8% | 6.9% | 11.9% | 25.3% | 3.1% | 1795 |
| Barranquilla | 53.7% | 7.6% | 13.9% | 21.8% | 3.0% | 7802 |
| Bello | 56.6% | 5.5% | 11.7% | 24.3% | 1.8% | 2933 |
| Bogotá, D.C. | 61.4% | 5.0% | 8.3% | 22.2% | 3.2% | 47935 |
| Bolívar | 39.7% | 15.1% | 17.9% | 21.2% | 6.0% | 8299 |
| Boyacá | 51.7% | 8.9% | 10.9% | 26.7% | 1.8% | 6891 |
| Bucaramanga | 60.3% | 5.4% | 8.0% | 24.5% | 1.7% | 3829 |
| Buenaventura | 54.2% | 8.1% | 13.0% | 21.7% | 3.0% | 2848 |
| Buga | 57.4% | 6.0% | 10.6% | 21.3% | 4.7% | 822 |
| Caldas | 53.9% | 5.9% | 11.2% | 26.7% | 2.2% | 4507 |
| Cali | 58.3% | 5.5% | 10.7% | 22.7% | 2.7% | 14472 |
| Caquetá | 51.7% | 10.5% | 12.5% | 22.9% | 2.4% | 2765 |
| Cartagena | 54.1% | 9.1% | 13.4% | 19.4% | 4.1% | 8117 |
| Cartago | 54.8% | 7.5% | 9.3% | 25.2% | 3.2% | 810 |
| Casanare | 49.1% | 9.7% | 11.8% | 26.4% | 3.1% | 2226 |
| Cauca | 52.2% | 9.7% | 12.0% | 22.9% | 3.3% | 9633 |
| Cesar | 52.8% | 8.4% | 14.1% | 21.5% | 3.3% | 6653 |
| Chocó | 42.7% | 13.6% | 17.4% | 20.6% | 5.7% | 3467 |
| Chía | 64.8% | 4.6% | 8.3% | 21.1% | 1.1% | 961 |
| Ciénaga | 53.4% | 7.3% | 14.8% | 18.5% | 6.0% | 1145 |
| Cundinamarca | 57.9% | 6.5% | 9.5% | 24.2% | 1.9% | 11913 |
| Córdoba | 45.5% | 12.2% | 16.2% | 22.0% | 4.0% | 9883 |
| Cúcuta | 55.7% | 6.6% | 11.5% | 24.6% | 1.7% | 5554 |
| Dosquebradas | 56.7% | 6.0% | 9.0% | 24.9% | 3.4% | 1195 |
| Duitama | 63.6% | 6.4% | 7.8% | 22.0% | 0.3% | 1002 |
| Envigado | 67.8% | 5.6% | 8.8% | 16.6% | 1.2% | 989 |
| Facatativá | 59.2% | 4.2% | 8.2% | 23.8% | 4.5% | 1082 |
| Florencia | 46.8% | 8.8% | 14.4% | 27.2% | 2.9% | 1576 |
| Floridablanca | 61.7% | 4.9% | 8.2% | 23.9% | 1.4% | 1916 |
| Fusagasugá | 58.9% | 5.5% | 10.8% | 22.7% | 2.0% | 1029 |
| Girardot | 50.4% | 7.8% | 11.2% | 26.6% | 3.9% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 56.0% | 7.3% | 9.5% | 26.5% | 0.8% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 1 |
| Guaviare | 46.3% | 10.9% | 13.0% | 25.2% | 4.6% | 807 |
| Huila | 51.6% | 8.0% | 11.7% | 26.9% | 1.7% | 6495 |
| Ibagué | 56.7% | 6.6% | 11.2% | 23.4% | 2.1% | 3875 |
| Ipiales | 50.1% | 7.5% | 10.1% | 31.1% | 1.2% | 1060 |
| Itagüí | 59.5% | 8.0% | 11.6% | 19.0% | 1.9% | 1337 |
| Jamundí | 52.9% | 8.4% | 10.6% | 25.9% | 2.2% | 814 |
| La Guajira | 48.6% | 10.5% | 17.3% | 19.5% | 4.1% | 3167 |
| Lorica | 43.4% | 14.4% | 16.1% | 21.8% | 4.3% | 1210 |
| Magangué | 40.4% | 14.0% | 19.1% | 22.4% | 4.2% | 1322 |
| Magdalena | 44.7% | 12.5% | 17.6% | 18.9% | 6.2% | 6777 |
| Maicao | 46.4% | 12.3% | 17.6% | 18.7% | 4.9% | 1599 |
| Malambo | 58.4% | 9.1% | 13.6% | 15.2% | 3.7% | 1034 |
| Manizales | 59.0% | 5.4% | 9.5% | 24.7% | 1.4% | 2465 |
| Medellín | 55.9% | 7.2% | 10.6% | 22.9% | 3.4% | 15391 |
| Meta | 50.8% | 7.8% | 11.9% | 26.3% | 3.3% | 4323 |
| Montería | 50.7% | 10.1% | 13.6% | 21.4% | 4.2% | 3814 |
| Mosquera | 60.2% | 3.4% | 8.0% | 27.2% | 1.3% | 854 |
| Nariño | 53.1% | 7.2% | 11.5% | 25.0% | 3.2% | 7668 |
| Neiva | 54.1% | 7.1% | 11.6% | 25.0% | 2.1% | 2915 |
| Norte de Santander | 55.9% | 7.7% | 11.1% | 23.7% | 1.7% | 6070 |
| Palmira | 60.3% | 4.0% | 11.3% | 22.5% | 1.9% | 2029 |
| Pasto | 56.4% | 6.0% | 9.4% | 26.8% | 1.4% | 3138 |
| Pereira | 54.8% | 6.4% | 9.0% | 27.2% | 2.6% | 3306 |
| Piedecuesta | 60.4% | 5.6% | 8.9% | 23.5% | 1.7% | 1128 |
| Pitalito | 54.3% | 6.7% | 10.3% | 26.4% | 2.3% | 1277 |
| Popayán | 58.3% | 5.5% | 10.9% | 23.4% | 1.8% | 2112 |
| Putumayo | 48.7% | 9.2% | 14.3% | 25.5% | 2.3% | 3178 |
| Quibdó | 50.9% | 10.3% | 12.9% | 21.1% | 4.8% | 1102 |
| Quindío | 49.3% | 6.0% | 11.9% | 29.6% | 3.2% | 2048 |
| Riohacha | 50.2% | 10.7% | 15.5% | 20.2% | 3.4% | 2025 |
| Rionegro | 58.3% | 6.4% | 9.8% | 24.4% | 1.1% | 813 |
| Risaralda | 51.0% | 7.7% | 11.4% | 28.0% | 2.0% | 2286 |
| Sabaneta | 59.0% | 3.6% | 10.6% | 26.7% | 0.0% | 329 |
| Sahagún | 47.9% | 9.9% | 15.8% | 22.5% | 3.8% | 997 |
| San Andrés | 47.4% | 15.8% | 14.1% | 20.6% | 2.2% | 418 |
| Santa Marta | 53.1% | 8.0% | 13.1% | 22.2% | 3.6% | 4045 |
| Santander | 56.1% | 7.2% | 10.6% | 24.7% | 1.4% | 6363 |

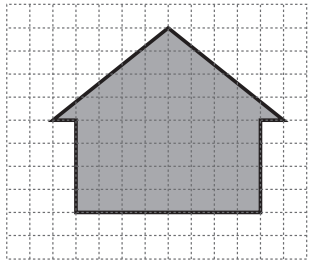
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 53.6% | 8.5% | 13.8% | 21.3% | 2.7% | 2578 |
| Soacha | 58.0% | 6.3% | 9.2% | 24.5% | 2.0% | 4048 |
| Sogamoso | 61.3% | 6.9% | 8.5% | 22.4% | 0.9% | 1119 |
| Soledad | 54.5% | 6.9% | 13.4% | 22.6% | 2.7% | 3865 |
| Sucre | 44.7% | 13.5% | 17.0% | 20.8% | 3.9% | 6080 |
| Tolima | 51.6% | 9.1% | 11.9% | 24.9% | 2.5% | 7517 |
| Tuluá | 57.8% | 5.7% | 10.4% | 24.3% | 1.8% | 1638 |
| Tumaco | 40.4% | 13.4% | 16.8% | 20.4% | 9.0% | 2161 |
| Tunja | 58.9% | 6.4% | 9.0% | 24.7% | 1.0% | 1288 |
| Turbo | 41.2% | 12.3% | 17.9% | 23.8% | 4.9% | 1473 |
| Uribia | 37.9% | 17.7% | 21.9% | 14.8% | 7.7% | 729 |
| Valle del Cauca | 52.0% | 7.4% | 11.9% | 25.8% | 3.0% | 6460 |
| Valledupar | 54.3% | 6.7% | 12.5% | 22.5% | 4.0% | 3519 |
| Vaupés | 16.7% | 16.7% | 16.7% | 0.0% | 50.0% | 6 |
| Vichada | 41.6% | 11.8% | 13.1% | 29.1% | 4.4% | 543 |
| Villavicencio | 58.4% | 6.1% | 9.0% | 24.5% | 2.0% | 4133 |
| Yopal | 53.6% | 8.1% | 7.7% | 27.5% | 3.1% | 1346 |
| Yumbo | 52.4% | 8.1% | 12.1% | 24.5% | 2.8% | 933 |
| Zipaquirá | 60.9% | 6.0% | 7.1% | 24.4% | 1.6% | 987 |
| Colombia | 53.9% | 7.9% | 11.8% | 23.2% | 3.1% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

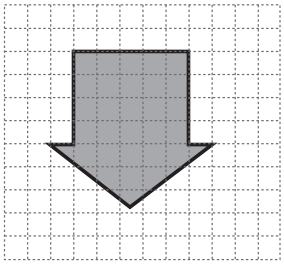
## • Pregunta 12.

Esta es una flecha que indica hacia arriba.

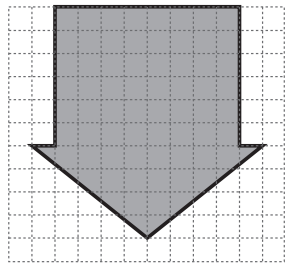


¿Cómo se verá esta flecha si ahora indica hacia abajo?

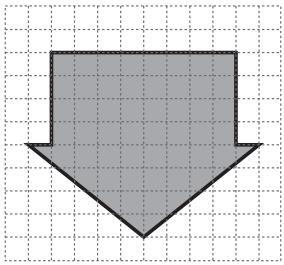
A.



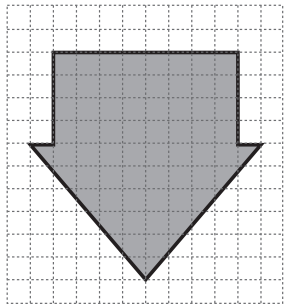
B.



C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Describir características de figuras que son semejantes o congruentes entre sí. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | C |

- **Resultados a nivel de Entidad Territorial certificada (ETC)**

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 12.3% | 16.3% | 48.4% | 17.8% | 5.4% | 800 |
| Antioquia | 10.9% | 16.6% | 56.0% | 13.4% | 3.1% | 22994 |
| Apartadó | 11.9% | 17.3% | 52.2% | 13.3% | 5.2% | 1357 |
| Arauca | 10.1% | 16.5% | 56.8% | 14.2% | 2.5% | 2079 |
| Armenia | 10.0% | 14.7% | 61.8% | 11.9% | 1.6% | 1916 |
| Atlántico | 11.0% | 15.4% | 55.7% | 12.3% | 5.5% | 4466 |
| Barrancabermeja | 8.1% | 12.3% | 63.7% | 13.4% | 2.5% | 1795 |
| Barranquilla | 9.2% | 14.2% | 61.4% | 11.9% | 3.4% | 7802 |
| Bello | 8.7% | 14.1% | 63.5% | 11.9% | 1.8% | 2933 |
| Bogotá, D.C. | 6.1% | 11.7% | 66.8% | 12.1% | 3.3% | 47935 |
| Bolívar | 13.5% | 20.1% | 44.1% | 16.0% | 6.4% | 8299 |
| Boyacá | 9.7% | 17.8% | 55.0% | 15.5% | 2.0% | 6891 |
| Bucaramanga | 6.1% | 10.9% | 69.9% | 11.0% | 2.1% | 3829 |
| Buenaventura | 9.7% | 14.8% | 59.6% | 12.7% | 3.2% | 2848 |
| Buga | 6.3% | 12.7% | 65.6% | 11.4% | 4.0% | 822 |
| Caldas | 9.5% | 14.2% | 61.6% | 12.3% | 2.4% | 4507 |
| Cali | 7.9% | 11.2% | 67.1% | 10.9% | 2.9% | 14472 |
| Caquetá | 12.4% | 15.8% | 56.5% | 13.2% | 2.1% | 2765 |
| Cartagena | 8.7% | 13.0% | 62.3% | 11.6% | 4.5% | 8117 |
| Cartago | 6.5% | 13.1% | 62.7% | 14.3% | 3.3% | 810 |
| Casanare | 12.5% | 17.7% | 51.0% | 15.2% | 3.5% | 2226 |
| Cauca | 9.6% | 15.9% | 58.1% | 12.9% | 3.5% | 9633 |
| Cesar | 11.2% | 16.4% | 55.4% | 13.5% | 3.5% | 6653 |
| Chocó | 12.7% | 19.5% | 47.8% | 14.1% | 5.9% | 3467 |
| Chía | 5.0% | 11.1% | 70.0% | 12.1% | 1.8% | 961 |
| Ciénaga | 8.6% | 13.0% | 60.7% | 11.4% | 6.2% | 1145 |
| Cundinamarca | 7.6% | 14.2% | 62.6% | 13.4% | 2.1% | 11913 |
| Córdoba | 12.4% | 19.0% | 49.4% | 15.0% | 4.2% | 9883 |
| Cúcuta | 8.4% | 13.9% | 62.7% | 13.1% | 2.0% | 5554 |
| Dosquebradas | 7.6% | 12.0% | 65.9% | 11.4% | 3.1% | 1195 |
| Duitama | 5.6% | 14.2% | 67.5% | 12.2% | 0.6% | 1002 |
| Envigado | 7.2% | 10.7% | 69.9% | 11.1% | 1.1% | 989 |
| Facatativá | 6.1% | 13.6% | 65.2% | 11.0% | 4.2% | 1082 |
| Florencia | 12.5% | 17.2% | 52.9% | 14.0% | 3.4% | 1576 |
| Floridablanca | 4.9% | 10.8% | 70.7% | 11.9% | 1.8% | 1916 |
| Fusagasugá | 7.4% | 13.1% | 65.2% | 12.7% | 1.6% | 1029 |
| Girardot | 11.2% | 15.4% | 56.7% | 13.1% | 3.6% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 7.6% | 15.4% | 63.9% | 12.3% | 0.9% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 1 |
| Guaviare | 10.8% | 17.1% | 54.0% | 14.7% | 3.3% | 807 |
| Huila | 10.0% | 16.9% | 56.8% | 14.3% | 2.0% | 6495 |
| Ibagué | 7.7% | 11.9% | 67.4% | 10.9% | 2.1% | 3875 |
| Ipiales | 7.8% | 11.8% | 66.2% | 12.4% | 1.8% | 1060 |
| Itagüí | 9.9% | 12.3% | 63.2% | 11.7% | 2.8% | 1337 |
| Jamundí | 9.8% | 13.0% | 61.3% | 13.4% | 2.5% | 814 |
| La Guajira | 11.2% | 16.5% | 54.2% | 13.7% | 4.4% | 3167 |
| Lorica | 12.1% | 18.6% | 50.6% | 15.4% | 3.4% | 1210 |
| Magangué | 16.0% | 19.4% | 44.6% | 15.3% | 4.8% | 1322 |
| Magdalena | 11.5% | 18.6% | 50.6% | 12.6% | 6.7% | 6777 |
| Maicao | 11.6% | 18.6% | 48.4% | 16.5% | 4.8% | 1599 |
| Malambo | 10.0% | 14.5% | 59.1% | 11.9% | 4.5% | 1034 |
| Manizales | 7.7% | 12.5% | 65.7% | 12.5% | 1.7% | 2465 |
| Medellín | 10.2% | 14.3% | 59.4% | 12.4% | 3.6% | 15391 |
| Meta | 11.0% | 15.9% | 55.0% | 14.6% | 3.5% | 4323 |
| Montería | 11.0% | 17.7% | 52.1% | 14.8% | 4.4% | 3814 |
| Mosquera | 7.1% | 13.7% | 65.6% | 11.9% | 1.6% | 854 |
| Nariño | 8.0% | 13.8% | 62.6% | 12.2% | 3.4% | 7668 |
| Neiva | 9.3% | 15.1% | 58.9% | 14.2% | 2.5% | 2915 |
| Norte de Santander | 8.7% | 14.0% | 62.7% | 12.8% | 1.8% | 6070 |
| Palmira | 7.0% | 11.3% | 69.4% | 10.2% | 2.0% | 2029 |
| Pasto | 7.1% | 12.3% | 67.7% | 11.3% | 1.6% | 3138 |
| Pereira | 9.9% | 13.1% | 61.4% | 12.4% | 3.3% | 3306 |
| Piedecuesta | 6.0% | 13.7% | 66.7% | 11.3% | 2.3% | 1128 |
| Pitalito | 10.3% | 13.9% | 60.9% | 12.4% | 2.6% | 1277 |
| Popayán | 7.8% | 12.5% | 64.2% | 13.1% | 2.4% | 2112 |
| Putumayo | 11.6% | 18.0% | 53.7% | 14.2% | 2.5% | 3178 |
| Quibdó | 9.3% | 19.9% | 51.1% | 14.2% | 5.4% | 1102 |
| Quindío | 10.0% | 16.0% | 58.3% | 12.3% | 3.5% | 2048 |
| Riohacha | 11.0% | 15.5% | 54.3% | 15.1% | 4.1% | 2025 |
| Rionegro | 8.2% | 15.7% | 61.0% | 13.3% | 1.7% | 813 |
| Risaralda | 10.8% | 15.4% | 60.0% | 11.9% | 2.0% | 2286 |
| Sabaneta | 4.6% | 9.7% | 75.4% | 10.0% | 0.3% | 329 |
| Sahagún | 9.0% | 18.7% | 53.7% | 14.4% | 4.2% | 997 |
| San Andrés | 11.5% | 19.4% | 52.4% | 13.4% | 3.3% | 418 |
| Santa Marta | 9.7% | 14.5% | 58.7% | 13.1% | 4.1% | 4045 |
| Santander | 8.2% | 14.5% | 62.2% | 13.8% | 1.3% | 6363 |

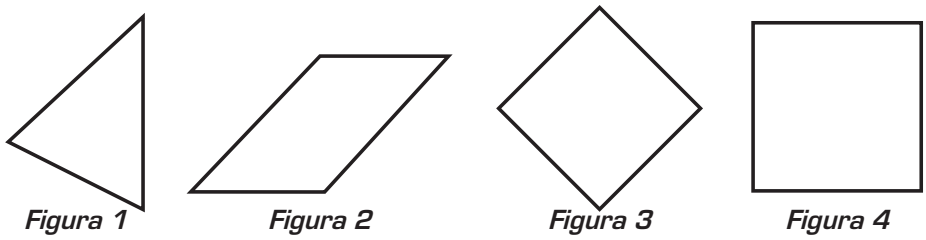
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 10.0% | 15.0% | 58.8% | 13.0% | 3.2% | 2578 |
| Soacha | 7.0% | 13.0% | 65.2% | 12.6% | 2.1% | 4048 |
| Sogamoso | 6.0% | 14.3% | 66.2% | 12.6% | 0.9% | 1119 |
| Soledad | 9.9% | 12.2% | 63.6% | 11.8% | 2.4% | 3865 |
| Sucre | 12.7% | 19.6% | 48.1% | 15.4% | 4.1% | 6080 |
| Tolima | 9.9% | 16.4% | 55.8% | 14.7% | 3.1% | 7517 |
| Tuluá | 7.8% | 11.7% | 67.1% | 11.6% | 1.9% | 1638 |
| Tumaco | 11.2% | 17.4% | 50.1% | 12.4% | 8.9% | 2161 |
| Tunja | 5.7% | 13.4% | 68.7% | 10.9% | 1.2% | 1288 |
| Turbo | 13.6% | 19.6% | 47.5% | 13.8% | 5.6% | 1473 |
| Uribia | 12.9% | 19.1% | 44.3% | 15.0% | 8.8% | 729 |
| Valle del Cauca | 9.3% | 14.8% | 60.3% | 12.6% | 3.0% | 6460 |
| Valledupar | 9.8% | 14.2% | 60.4% | 11.4% | 4.2% | 3519 |
| Vaupés | 0.0% | 16.7% | 0.0% | 16.7% | 66.7% | 6 |
| Vichada | 11.6% | 14.7% | 49.2% | 19.7% | 4.8% | 543 |
| Villavicencio | 7.6% | 12.8% | 65.1% | 12.8% | 1.7% | 4133 |
| Yopal | 10.0% | 12.0% | 60.8% | 13.4% | 3.6% | 1346 |
| Yumbo | 9.8% | 14.6% | 61.3% | 11.8% | 2.6% | 933 |
| Zipaquirá | 5.2% | 14.7% | 67.7% | 10.6% | 1.8% | 987 |
| Colombia | 9.2% | 14.7% | 59.8% | 13.0% | 3.3% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 13.

¿Cuál figura **NO** tiene el mismo número de lados que las demás?




A. La 1.
B. La 2.
C. La 3.
D. La 4.

## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Establecer diferencias y similitudes entre objetos bidimensionales y tridimensionales de acuerdo con sus propiedades. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 43.9% | 15.3% | 13.3% | 22.6% | 5.0% | 800 |
| Antioquia | 53.0% | 12.6% | 11.4% | 19.3% | 3.6% | 22994 |
| Apartadó | 48.3% | 14.9% | 13.7% | 17.9% | 5.2% | 1357 |
| Arauca | 56.1% | 11.9% | 11.5% | 18.0% | 2.5% | 2079 |
| Armenia | 57.2% | 14.6% | 11.3% | 15.1% | 1.8% | 1916 |
| Atlántico | 52.2% | 11.4% | 11.7% | 19.2% | 5.4% | 4466 |
| Barrancabermeja | 53.8% | 15.3% | 11.0% | 16.6% | 3.2% | 1795 |
| Barranquilla | 54.2% | 12.4% | 11.8% | 17.8% | 3.8% | 7802 |
| Bello | 61.8% | 11.1% | 10.0% | 14.9% | 2.2% | 2933 |
| Bogotá, D.C. | 67.6% | 9.6% | 7.9% | 11.5% | 3.5% | 47935 |
| Bolívar | 37.6% | 14.3% | 14.5% | 26.6% | 7.0% | 8299 |
| Boyacá | 55.3% | 12.6% | 11.2% | 18.5% | 2.3% | 6891 |
| Bucaramanga | 68.7% | 9.7% | 7.7% | 12.1% | 1.8% | 3829 |
| Buenaventura | 53.7% | 11.7% | 11.9% | 19.2% | 3.5% | 2848 |
| Buga | 63.9% | 10.1% | 6.8% | 15.2% | 4.0% | 822 |
| Caldas | 60.3% | 11.8% | 9.9% | 15.6% | 2.4% | 4507 |
| Cali | 61.3% | 11.0% | 10.0% | 14.4% | 3.3% | 14472 |
| Caquetá | 53.7% | 12.0% | 10.6% | 21.1% | 2.5% | 2765 |
| Cartagena | 55.6% | 11.0% | 11.0% | 17.4% | 4.9% | 8117 |
| Cartago | 55.8% | 15.7% | 10.9% | 14.3% | 3.3% | 810 |
| Casanare | 48.8% | 14.5% | 12.8% | 20.6% | 3.3% | 2226 |
| Cauca | 56.9% | 11.0% | 10.4% | 17.7% | 4.0% | 9633 |
| Cesar | 50.6% | 12.5% | 11.5% | 21.5% | 3.8% | 6653 |
| Chocó | 41.5% | 13.6% | 12.8% | 25.2% | 6.9% | 3467 |
| Chía | 71.3% | 8.8% | 6.6% | 11.1% | 2.2% | 961 |
| Ciénaga | 58.4% | 8.6% | 8.6% | 17.7% | 6.6% | 1145 |
| Cundinamarca | 63.9% | 10.3% | 9.3% | 14.1% | 2.5% | 11913 |
| Córdoba | 43.5% | 13.4% | 13.8% | 24.5% | 4.8% | 9883 |
| Cúcuta | 57.4% | 13.1% | 11.0% | 16.5% | 2.0% | 5554 |
| Dosquebradas | 58.7% | 11.0% | 10.9% | 15.5% | 4.0% | 1195 |
| Duitama | 71.5% | 10.9% | 7.4% | 9.6% | 0.7% | 1002 |
| Envigado | 74.8% | 8.1% | 6.2% | 9.5% | 1.4% | 989 |
| Facatativá | 65.6% | 10.3% | 7.8% | 11.6% | 4.7% | 1082 |
| Florencia | 48.4% | 13.8% | 13.0% | 21.4% | 3.4% | 1576 |
| Floridablanca | 68.8% | 9.9% | 7.7% | 11.5% | 2.0% | 1916 |
| Fusagasugá | 62.4% | 11.4% | 8.6% | 15.3% | 2.3% | 1029 |
| Girardot | 51.6% | 10.6% | 14.0% | 19.5% | 4.4% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 61.1% | 12.2% | 9.4% | 16.3% | 1.1% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 46.2% | 12.6% | 13.8% | 22.3% | 5.1% | 807 |
| Huila | 54.5% | 12.4% | 11.4% | 19.5% | 2.2% | 6495 |
| Ibagué | 61.6% | 10.9% | 9.9% | 15.1% | 2.6% | 3875 |
| Ipiales | 64.6% | 10.0% | 8.9% | 14.7% | 1.8% | 1060 |
| Itagüí | 61.7% | 12.1% | 10.5% | 13.0% | 2.7% | 1337 |
| Jamundí | 57.4% | 11.5% | 11.7% | 17.3% | 2.1% | 814 |
| La Guajira | 50.8% | 12.1% | 12.1% | 20.7% | 4.4% | 3167 |
| Lorica | 46.4% | 13.1% | 14.1% | 22.8% | 3.5% | 1210 |
| Magangué | 38.6% | 13.2% | 14.8% | 28.1% | 5.2% | 1322 |
| Magdalena | 44.1% | 12.9% | 12.8% | 22.8% | 7.4% | 6777 |
| Maicao | 43.5% | 13.9% | 15.1% | 21.9% | 5.6% | 1599 |
| Malambo | 55.9% | 11.9% | 9.0% | 18.1% | 5.1% | 1034 |
| Manizales | 64.5% | 10.7% | 10.7% | 12.2% | 2.0% | 2465 |
| Medellín | 59.1% | 11.3% | 10.4% | 14.9% | 4.2% | 15391 |
| Meta | 50.5% | 13.7% | 11.8% | 20.3% | 3.7% | 4323 |
| Montería | 45.7% | 14.3% | 14.1% | 21.4% | 4.5% | 3814 |
| Mosquera | 67.7% | 9.0% | 8.1% | 13.5% | 1.8% | 854 |
| Nariño | 62.0% | 10.3% | 9.5% | 14.7% | 3.5% | 7668 |
| Neiva | 55.5% | 12.7% | 10.5% | 18.5% | 2.8% | 2915 |
| Norte de Santander | 59.9% | 11.4% | 9.9% | 16.7% | 2.0% | 6070 |
| Palmira | 63.1% | 10.4% | 9.6% | 15.0% | 1.9% | 2029 |
| Pasto | 64.8% | 11.0% | 9.7% | 12.2% | 2.3% | 3138 |
| Pereira | 58.9% | 11.9% | 10.9% | 15.1% | 3.2% | 3306 |
| Piedecuesta | 68.1% | 9.3% | 9.0% | 11.1% | 2.5% | 1128 |
| Pitalito | 55.0% | 12.6% | 11.4% | 18.8% | 2.2% | 1277 |
| Popayán | 63.8% | 11.3% | 9.2% | 13.1% | 2.6% | 2112 |
| Putumayo | 48.2% | 15.5% | 13.2% | 21.1% | 2.0% | 3178 |
| Quibdó | 50.4% | 13.6% | 11.5% | 17.6% | 6.9% | 1102 |
| Quindío | 52.6% | 12.5% | 11.5% | 18.9% | 4.6% | 2048 |
| Riohacha | 53.0% | 11.6% | 11.4% | 19.8% | 4.2% | 2025 |
| Rionegro | 65.7% | 10.6% | 10.2% | 11.4% | 2.1% | 813 |
| Risaralda | 53.6% | 12.8% | 11.2% | 19.3% | 3.1% | 2286 |
| Sabaneta | 70.8% | 9.1% | 9.7% | 9.1% | 1.2% | 329 |
| Sahagún | 46.5% | 14.3% | 13.6% | 22.0% | 3.5% | 997 |
| San Andrés | 45.5% | 13.4% | 16.7% | 21.8% | 2.6% | 418 |
| Santa Marta | 54.1% | 11.9% | 11.2% | 18.4% | 4.4% | 4045 |
| Santander | 62.5% | 10.8% | 8.9% | 16.3% | 1.5% | 6363 |

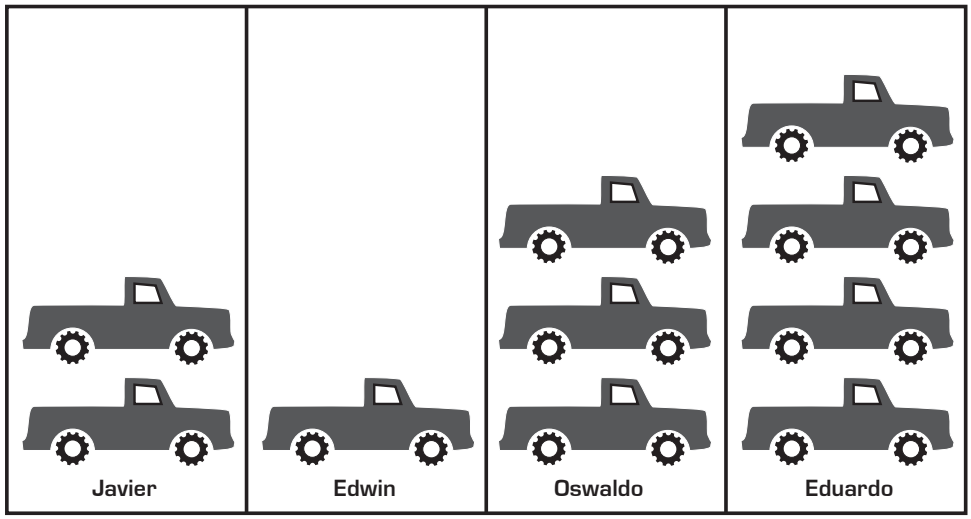
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 54.2% | 12.3% | 11.4% | 18.6% | 3.5% | 2578 |
| Soacha | 64.7% | 10.1% | 9.7% | 13.5% | 2.0% | 4048 |
| Sogamoso | 67.4% | 10.4% | 8.8% | 12.3% | 1.2% | 1119 |
| Soledad | 57.2% | 11.1% | 10.7% | 18.4% | 2.6% | 3865 |
| Sucre | 42.8% | 13.8% | 13.2% | 25.4% | 4.8% | 6080 |
| Tolima | 52.5% | 11.5% | 11.9% | 21.0% | 3.0% | 7517 |
| Tuluá | 61.7% | 10.7% | 10.0% | 15.8% | 2.0% | 1638 |
| Tumaco | 41.4% | 12.8% | 14.1% | 22.6% | 9.1% | 2161 |
| Tunja | 67.5% | 10.6% | 9.2% | 11.3% | 1.5% | 1288 |
| Turbo | 40.7% | 14.5% | 13.4% | 25.2% | 6.3% | 1473 |
| Uribia | 36.9% | 17.1% | 14.7% | 21.7% | 9.6% | 729 |
| Valle del Cauca | 54.7% | 11.8% | 11.0% | 19.1% | 3.4% | 6460 |
| Valledupar | 53.9% | 11.1% | 11.3% | 19.0% | 4.7% | 3519 |
| Vaupés | 0.0% | 0.0% | 16.7% | 33.3% | 50.0% | 6 |
| Vichada | 48.6% | 14.5% | 10.5% | 22.1% | 4.2% | 543 |
| Villavicencio | 61.2% | 11.9% | 10.2% | 14.4% | 2.3% | 4133 |
| Yopal | 55.9% | 12.5% | 10.6% | 17.6% | 3.3% | 1346 |
| Yumbo | 53.8% | 11.8% | 12.6% | 18.9% | 2.9% | 933 |
| Zipaquirá | 71.0% | 9.4% | 8.0% | 9.9% | 1.6% | 987 |
| Colombia | 56.9% | 11.7% | 10.7% | 17.2% | 3.6% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 14.

Observa la cantidad de carritos que tienen cuatro niños.



¿Quién tiene menos carritos?

A. Javier.
B. Edwin.
C. Oswaldo.
D. Eduardo.

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Aleatorio |
| **Afirmación** | Representar un conjunto de datos a partir de un diagrama de barras e interpretar lo que un diagrama de barras determinado representa. |
| **Nivel de desempeño** | Mínimo |
| **Respuesta Correcta** | B |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 9.8% | 62.3% | 5.5% | 17.4% | 5.1% | 800 |
| Antioquia | 8.6% | 71.0% | 3.4% | 13.9% | 3.1% | 22994 |
| Apartadó | 11.9% | 65.1% | 4.7% | 13.9% | 4.3% | 1357 |
| Arauca | 7.2% | 72.4% | 3.3% | 14.9% | 2.2% | 2079 |
| Armenia | 7.9% | 76.5% | 2.5% | 11.5% | 1.7% | 1916 |
| Atlántico | 10.6% | 63.9% | 5.0% | 15.4% | 5.2% | 4466 |
| Barrancabermeja | 7.7% | 75.4% | 3.1% | 10.9% | 2.8% | 1795 |
| Barranquilla | 7.7% | 72.1% | 3.0% | 13.8% | 3.4% | 7802 |
| Bello | 6.2% | 78.1% | 2.3% | 11.1% | 2.2% | 2933 |
| Bogotá, D.C. | 4.9% | 81.8% | 1.8% | 8.0% | 3.5% | 47935 |
| Bolívar | 14.0% | 53.0% | 7.1% | 20.2% | 5.7% | 8299 |
| Boyacá | 6.5% | 74.5% | 3.7% | 13.5% | 1.8% | 6891 |
| Bucaramanga | 5.1% | 81.7% | 1.8% | 9.4% | 1.9% | 3829 |
| Buenaventura | 8.2% | 69.7% | 3.7% | 15.5% | 2.9% | 2848 |
| Buga | 6.8% | 76.8% | 1.7% | 10.8% | 3.9% | 822 |
| Caldas | 7.0% | 73.6% | 3.0% | 14.2% | 2.2% | 4507 |
| Cali | 5.7% | 79.2% | 2.3% | 9.9% | 2.9% | 14472 |
| Caquetá | 9.2% | 69.2% | 3.5% | 16.2% | 1.9% | 2765 |
| Cartagena | 8.3% | 70.1% | 3.8% | 13.9% | 3.9% | 8117 |
| Cartago | 7.0% | 75.4% | 2.7% | 11.4% | 3.5% | 810 |
| Casanare | 7.0% | 72.9% | 2.5% | 14.7% | 2.9% | 2226 |
| Cauca | 8.3% | 69.0% | 3.7% | 15.5% | 3.4% | 9633 |
| Cesar | 8.7% | 67.2% | 3.9% | 16.9% | 3.3% | 6653 |
| Chocó | 14.5% | 54.4% | 5.7% | 20.1% | 5.3% | 3467 |
| Chía | 5.2% | 84.2% | 1.4% | 7.7% | 1.6% | 961 |
| Ciénaga | 8.6% | 68.9% | 3.7% | 12.9% | 5.9% | 1145 |
| Cundinamarca | 5.6% | 78.3% | 2.4% | 11.7% | 2.0% | 11913 |
| Córdoba | 11.4% | 60.2% | 5.5% | 19.1% | 3.9% | 9883 |
| Cúcuta | 5.7% | 78.2% | 2.5% | 11.8% | 1.7% | 5554 |
| Dosquebradas | 4.8% | 79.9% | 2.7% | 9.2% | 3.4% | 1195 |
| Duitama | 4.6% | 88.2% | 1.9% | 4.9% | 0.4% | 1002 |
| Envigado | 5.9% | 83.6% | 1.4% | 7.3% | 1.8% | 989 |
| Facatativá | 5.8% | 79.9% | 2.1% | 8.1% | 4.1% | 1082 |
| Florencia | 7.7% | 70.4% | 3.7% | 14.5% | 3.7% | 1576 |
| Floridablanca | 4.6% | 83.6% | 2.0% | 7.8% | 2.0% | 1916 |
| Fusagasugá | 6.3% | 78.6% | 2.8% | 10.8% | 1.5% | 1029 |
| Girardot | 7.4% | 70.2% | 2.3% | 16.3% | 3.8% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 5.0% | 79.7% | 3.3% | 11.3% | 0.8% | 1046 |
| Guainía | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 10.7% | 68.2% | 3.7% | 13.5% | 4.0% | 807 |
| Huila | 6.7% | 72.5% | 3.1% | 15.9% | 1.9% | 6495 |
| Ibagué | 5.5% | 79.3% | 2.5% | 10.4% | 2.3% | 3875 |
| Ipiales | 5.1% | 78.9% | 2.7% | 11.3% | 2.0% | 1060 |
| Itagüí | 7.8% | 79.9% | 1.6% | 8.6% | 2.1% | 1337 |
| Jamundí | 8.0% | 73.1% | 3.1% | 12.9% | 2.9% | 814 |
| La Guajira | 10.3% | 63.9% | 5.5% | 16.5% | 3.8% | 3167 |
| Lorica | 14.5% | 56.4% | 6.2% | 20.7% | 2.1% | 1210 |
| Magangué | 14.5% | 51.4% | 6.7% | 22.8% | 4.7% | 1322 |
| Magdalena | 12.2% | 55.5% | 5.6% | 20.1% | 6.7% | 6777 |
| Maicao | 13.4% | 56.8% | 5.9% | 19.3% | 4.6% | 1599 |
| Malambo | 9.0% | 68.2% | 2.5% | 16.2% | 4.2% | 1034 |
| Manizales | 6.4% | 80.4% | 1.9% | 9.5% | 1.8% | 2465 |
| Medellín | 7.8% | 74.6% | 2.6% | 11.1% | 3.9% | 15391 |
| Meta | 8.0% | 70.7% | 3.5% | 14.5% | 3.4% | 4323 |
| Montería | 9.3% | 67.5% | 4.2% | 14.7% | 4.2% | 3814 |
| Mosquera | 5.4% | 83.8% | 2.0% | 7.7% | 1.1% | 854 |
| Nariño | 6.7% | 75.2% | 3.1% | 12.3% | 2.8% | 7668 |
| Neiva | 7.1% | 75.4% | 3.1% | 11.8% | 2.6% | 2915 |
| Norte de Santander | 5.7% | 77.1% | 2.4% | 13.1% | 1.6% | 6070 |
| Palmira | 5.2% | 81.8% | 1.6% | 9.7% | 1.7% | 2029 |
| Pasto | 5.8% | 81.6% | 2.0% | 8.7% | 1.9% | 3138 |
| Pereira | 6.5% | 76.6% | 2.4% | 11.3% | 3.2% | 3306 |
| Piedecuesta | 5.7% | 82.0% | 1.4% | 9.0% | 1.9% | 1128 |
| Pitalito | 6.5% | 72.8% | 2.3% | 16.5% | 1.8% | 1277 |
| Popayán | 6.3% | 78.8% | 2.3% | 10.4% | 2.2% | 2112 |
| Putumayo | 8.7% | 70.6% | 4.0% | 14.4% | 2.3% | 3178 |
| Quibdó | 10.9% | 62.4% | 6.2% | 15.4% | 5.1% | 1102 |
| Quindío | 8.3% | 70.9% | 2.8% | 13.9% | 4.1% | 2048 |
| Riohacha | 10.2% | 66.2% | 4.5% | 14.9% | 4.2% | 2025 |
| Rionegro | 5.9% | 80.6% | 3.1% | 9.1% | 1.4% | 813 |
| Risaralda | 7.7% | 71.4% | 3.0% | 15.9% | 2.0% | 2286 |
| Sabaneta | 4.9% | 87.5% | 0.9% | 6.1% | 0.6% | 329 |
| Sahagún | 9.1% | 66.7% | 4.7% | 15.9% | 3.5% | 997 |
| San Andrés | 12.7% | 63.2% | 4.5% | 15.1% | 4.5% | 418 |
| Santa Marta | 8.7% | 70.1% | 3.5% | 14.2% | 3.5% | 4045 |
| Santander | 6.0% | 78.1% | 2.4% | 11.9% | 1.6% | 6363 |

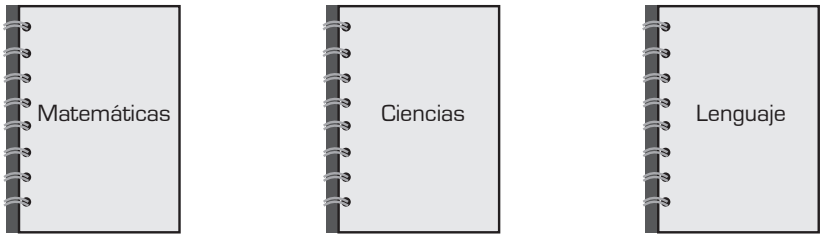
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 8.0% | 72.1% | 3.7% | 12.9% | 3.3% | 2578 |
| Soacha | 6.1% | 80.6% | 2.1% | 9.2% | 2.0% | 4048 |
| Sogamoso | 5.5% | 83.5% | 1.9% | 8.3% | 0.9% | 1119 |
| Soledad | 7.4% | 74.2% | 2.8% | 13.1% | 2.5% | 3865 |
| Sucre | 11.7% | 58.4% | 5.9% | 20.2% | 3.9% | 6080 |
| Tolima | 7.9% | 68.8% | 4.0% | 16.7% | 2.6% | 7517 |
| Tuluá | 6.0% | 78.1% | 1.9% | 12.5% | 1.5% | 1638 |
| Tumaco | 13.7% | 53.2% | 5.4% | 19.3% | 8.4% | 2161 |
| Tunja | 6.5% | 82.5% | 1.5% | 8.2% | 1.3% | 1288 |
| Turbo | 13.7% | 57.8% | 4.9% | 18.7% | 5.0% | 1473 |
| Uribia | 15.9% | 49.1% | 8.1% | 19.6% | 7.3% | 729 |
| Valle del Cauca | 7.3% | 72.5% | 3.5% | 13.7% | 2.9% | 6460 |
| Valledupar | 7.5% | 71.5% | 2.9% | 14.0% | 4.1% | 3519 |
| Vaupés | 0.0% | 33.3% | 16.7% | 0.0% | 50.0% | 6 |
| Vichada | 9.2% | 61.3% | 3.5% | 22.3% | 3.7% | 543 |
| Villavicencio | 6.1% | 80.0% | 2.3% | 9.8% | 1.8% | 4133 |
| Yopal | 7.0% | 74.3% | 2.1% | 13.2% | 3.5% | 1346 |
| Yumbo | 8.5% | 71.0% | 3.8% | 14.1% | 2.7% | 933 |
| Zipaquirá | 4.8% | 82.7% | 1.4% | 9.2% | 1.9% | 987 |
| Colombia | 7.6% | 73.0% | 3.2% | 13.0% | 3.2% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

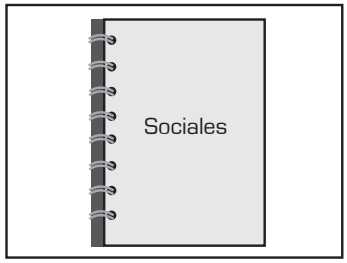
## • Pregunta 15.

Nicolás tiene estos cuadernos en su maleta.

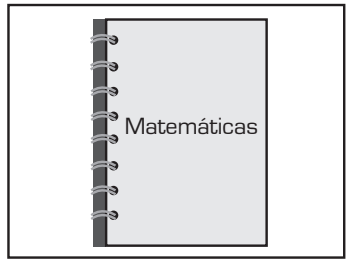



Él sacó un cuaderno sin mirar. ¿Cuál **NO** puede ser el cuaderno que sacó?

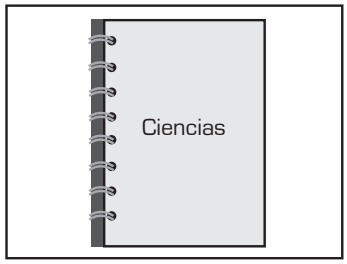
A.



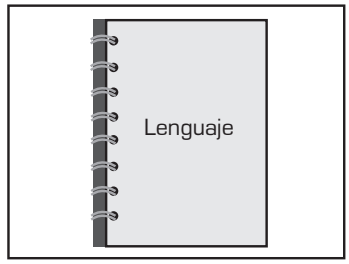

B.




C.




D.




## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Aleatorio |
| **Afirmación** | Establecer conjeturas acerca de la posibilidad de ocurrencia de eventos. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 52.3% | 19.8% | 12.4% | 10.6% | 5.0% | 800 |
| Antioquia | 56.7% | 18.5% | 10.7% | 10.3% | 3.8% | 22994 |
| Apartadó | 51.7% | 18.2% | 12.7% | 11.7% | 5.7% | 1357 |
| Arauca | 58.2% | 18.2% | 11.6% | 9.4% | 2.6% | 2079 |
| Armenia | 62.3% | 16.3% | 10.4% | 8.4% | 2.6% | 1916 |
| Atlántico | 54.4% | 17.9% | 12.4% | 8.7% | 6.6% | 4466 |
| Barrancabermeja | 62.5% | 14.9% | 10.4% | 8.6% | 3.7% | 1795 |
| Barranquilla | 61.9% | 16.4% | 10.5% | 7.1% | 4.1% | 7802 |
| Bello | 68.0% | 14.2% | 7.7% | 6.9% | 3.2% | 2933 |
| Bogotá, D.C. | 72.9% | 10.1% | 6.7% | 6.2% | 4.0% | 47935 |
| Bolívar | 41.1% | 24.0% | 15.9% | 12.0% | 7.0% | 8299 |
| Boyacá | 54.6% | 18.3% | 14.4% | 10.3% | 2.5% | 6891 |
| Bucaramanga | 70.9% | 12.3% | 7.3% | 7.1% | 2.4% | 3829 |
| Buenaventura | 58.6% | 18.7% | 10.3% | 8.8% | 3.7% | 2848 |
| Buga | 65.1% | 13.7% | 10.1% | 6.6% | 4.5% | 822 |
| Caldas | 61.7% | 16.1% | 10.4% | 9.3% | 2.5% | 4507 |
| Cali | 70.5% | 12.0% | 7.6% | 6.5% | 3.4% | 14472 |
| Caquetá | 56.9% | 19.9% | 12.2% | 8.5% | 2.5% | 2765 |
| Cartagena | 61.8% | 16.2% | 9.8% | 7.3% | 4.9% | 8117 |
| Cartago | 66.5% | 13.0% | 9.6% | 6.8% | 4.1% | 810 |
| Casanare | 54.4% | 19.6% | 11.2% | 10.9% | 3.9% | 2226 |
| Cauca | 60.5% | 16.4% | 10.3% | 9.3% | 3.5% | 9633 |
| Cesar | 56.7% | 19.1% | 11.2% | 9.3% | 3.8% | 6653 |
| Chocó | 45.6% | 21.9% | 14.1% | 11.9% | 6.4% | 3467 |
| Chía | 76.5% | 9.2% | 5.4% | 6.9% | 2.1% | 961 |
| Ciénaga | 61.6% | 14.1% | 10.2% | 7.3% | 6.7% | 1145 |
| Cundinamarca | 68.1% | 12.8% | 8.6% | 8.1% | 2.4% | 11913 |
| Córdoba | 47.2% | 21.5% | 14.9% | 11.5% | 5.0% | 9883 |
| Cúcuta | 67.0% | 14.0% | 10.0% | 6.9% | 2.2% | 5554 |
| Dosquebradas | 70.0% | 11.8% | 8.2% | 6.3% | 3.8% | 1195 |
| Duitama | 74.7% | 11.4% | 8.4% | 4.9% | 0.7% | 1002 |
| Envigado | 81.8% | 7.3% | 4.0% | 5.0% | 1.9% | 989 |
| Facatativá | 70.1% | 12.7% | 7.4% | 5.3% | 4.5% | 1082 |
| Florencia | 55.6% | 17.5% | 12.2% | 10.3% | 4.4% | 1576 |
| Floridablanca | 72.8% | 9.8% | 8.1% | 7.1% | 2.2% | 1916 |
| Fusagasugá | 67.5% | 13.9% | 9.2% | 6.8% | 2.5% | 1029 |
| Girardot | 62.6% | 17.4% | 8.7% | 7.0% | 4.2% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 66.9% | 13.6% | 10.1% | 7.4% | 2.0% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 51.2% | 19.7% | 14.7% | 10.2% | 4.2% | 807 |
| Huila | 59.1% | 18.0% | 11.0% | 9.5% | 2.5% | 6495 |
| Ibagué | 70.1% | 12.6% | 7.4% | 6.8% | 3.1% | 3875 |
| Ipiales | 69.2% | 11.4% | 10.0% | 7.8% | 1.6% | 1060 |
| Itagüí | 69.8% | 11.7% | 9.4% | 6.4% | 2.7% | 1337 |
| Jamundí | 60.8% | 17.1% | 11.3% | 8.2% | 2.6% | 814 |
| La Guajira | 54.6% | 19.1% | 11.9% | 9.6% | 4.8% | 3167 |
| Lorica | 47.4% | 21.1% | 16.1% | 10.9% | 4.5% | 1210 |
| Magangué | 41.1% | 23.0% | 17.6% | 12.3% | 6.0% | 1322 |
| Magdalena | 49.0% | 20.5% | 13.6% | 9.9% | 7.1% | 6777 |
| Maicao | 48.7% | 23.3% | 12.0% | 9.8% | 6.3% | 1599 |
| Malambo | 59.0% | 18.5% | 9.9% | 6.5% | 6.2% | 1034 |
| Manizales | 68.4% | 12.7% | 9.5% | 7.1% | 2.4% | 2465 |
| Medellín | 62.7% | 14.8% | 9.5% | 8.4% | 4.6% | 15391 |
| Meta | 55.1% | 18.0% | 12.1% | 11.1% | 3.7% | 4323 |
| Montería | 50.7% | 20.3% | 14.3% | 9.9% | 4.7% | 3814 |
| Mosquera | 75.4% | 9.1% | 7.1% | 6.1% | 2.2% | 854 |
| Nariño | 65.0% | 14.1% | 9.6% | 8.1% | 3.2% | 7668 |
| Neiva | 62.5% | 15.6% | 10.2% | 8.5% | 3.1% | 2915 |
| Norte de Santander | 63.1% | 15.6% | 10.5% | 8.5% | 2.4% | 6070 |
| Palmira | 73.4% | 10.4% | 7.5% | 6.4% | 2.2% | 2029 |
| Pasto | 69.7% | 11.6% | 9.9% | 6.4% | 2.3% | 3138 |
| Pereira | 63.0% | 15.2% | 9.0% | 9.0% | 3.8% | 3306 |
| Piedecuesta | 72.0% | 11.1% | 7.7% | 6.9% | 2.3% | 1128 |
| Pitalito | 58.5% | 19.0% | 10.7% | 9.2% | 2.6% | 1277 |
| Popayán | 70.2% | 12.1% | 7.1% | 8.3% | 2.3% | 2112 |
| Putumayo | 56.1% | 18.5% | 12.3% | 9.8% | 3.2% | 3178 |
| Quibdó | 50.5% | 19.7% | 13.0% | 11.3% | 5.5% | 1102 |
| Quindío | 58.0% | 15.2% | 11.7% | 10.4% | 4.7% | 2048 |
| Riohacha | 55.1% | 19.9% | 10.8% | 9.5% | 4.8% | 2025 |
| Rionegro | 66.1% | 14.4% | 10.0% | 7.5% | 2.1% | 813 |
| Risaralda | 58.9% | 18.5% | 9.8% | 10.1% | 2.7% | 2286 |
| Sabaneta | 76.6% | 11.2% | 4.6% | 6.1% | 1.5% | 329 |
| Sahagún | 54.4% | 19.1% | 12.6% | 10.0% | 3.9% | 997 |
| San Andrés | 56.9% | 20.8% | 12.2% | 6.7% | 3.3% | 418 |
| Santa Marta | 60.0% | 16.8% | 10.6% | 8.6% | 4.1% | 4045 |
| Santander | 65.8% | 14.5% | 9.5% | 8.5% | 1.8% | 6363 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 61.0% | 14.8% | 11.6% | 8.7% | 3.8% | 2578 |
| Soacha | 70.1% | 12.2% | 8.2% | 7.5% | 2.1% | 4048 |
| Sogamoso | 69.6% | 11.5% | 9.4% | 8.0% | 1.5% | 1119 |
| Soledad | 63.6% | 16.7% | 9.9% | 6.9% | 2.8% | 3865 |
| Sucre | 47.2% | 22.3% | 14.4% | 11.3% | 4.8% | 6080 |
| Tolima | 57.0% | 19.3% | 10.5% | 9.8% | 3.5% | 7517 |
| Tuluá | 66.9% | 15.4% | 9.6% | 5.6% | 2.4% | 1638 |
| Tumaco | 46.6% | 22.7% | 12.2% | 9.2% | 9.3% | 2161 |
| Tunja | 72.7% | 10.2% | 9.5% | 5.6% | 1.9% | 1288 |
| Turbo | 44.9% | 22.9% | 13.3% | 12.3% | 6.7% | 1473 |
| Uribia | 42.9% | 23.9% | 15.8% | 7.7% | 9.7% | 729 |
| Valle del Cauca | 61.6% | 15.4% | 10.5% | 9.0% | 3.5% | 6460 |
| Valledupar | 62.3% | 15.5% | 10.0% | 7.5% | 4.7% | 3519 |
| Vaupés | 33.3% | 16.7% | 0.0% | 0.0% | 50.0% | 6 |
| Vichada | 52.7% | 23.9% | 9.8% | 8.5% | 5.2% | 543 |
| Villavicencio | 68.9% | 14.0% | 7.8% | 7.0% | 2.3% | 4133 |
| Yopal | 59.2% | 17.5% | 9.2% | 9.3% | 4.8% | 1346 |
| Yumbo | 56.9% | 18.0% | 12.3% | 8.5% | 4.3% | 933 |
| Zipaquirá | 75.2% | 9.2% | 6.5% | 6.6% | 2.5% | 987 |
| Colombia | 61.8% | 15.7% | 10.1% | 8.5% | 3.8% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 16.

Diez niños de un grupo votaron por el color que querían para el uniforme de su equipo de atletismo.

El color más votado será el de la camiseta y el segundo más votado, el de la pantaloneta.

Estos fueron los resultados:

***Azul, rojo, negro, azul, verde, azul, gris, blanco, blanco, amarillo.***

Los colores de la camiseta y la pantaloneta deben ser

A. azul y blanco.
B. azul y rojo.
C. blanco y negro.
D. gris y amarillo.

## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Aleatorio |
| **Afirmación** | Resolver problemas a partir del análisis de datos recolectados. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 47.9% | 17.1% | 17.5% | 11.3% | 6.3% | 800 |
| Antioquia | 58.9% | 16.5% | 12.7% | 7.3% | 4.6% | 22994 |
| Apartadó | 56.0% | 15.6% | 13.1% | 8.8% | 6.5% | 1357 |
| Arauca | 60.7% | 16.5% | 11.4% | 8.3% | 3.3% | 2079 |
| Armenia | 60.0% | 17.2% | 13.0% | 6.4% | 3.3% | 1916 |
| Atlántico | 53.7% | 16.7% | 13.2% | 9.0% | 7.4% | 4466 |
| Barrancabermeja | 62.1% | 15.1% | 12.0% | 5.7% | 5.1% | 1795 |
| Barranquilla | 62.5% | 15.3% | 11.0% | 6.2% | 5.1% | 7802 |
| Bello | 67.4% | 13.2% | 10.7% | 4.8% | 3.9% | 2933 |
| Bogotá, D.C. | 70.3% | 12.8% | 8.6% | 3.8% | 4.5% | 47935 |
| Bolívar | 43.0% | 19.6% | 16.6% | 12.7% | 8.2% | 8299 |
| Boyacá | 53.2% | 20.4% | 14.9% | 8.6% | 3.0% | 6891 |
| Bucaramanga | 70.1% | 13.6% | 9.6% | 4.0% | 2.7% | 3829 |
| Buenaventura | 64.6% | 14.1% | 10.3% | 6.7% | 4.2% | 2848 |
| Buga | 69.1% | 12.7% | 10.2% | 3.4% | 4.6% | 822 |
| Caldas | 60.5% | 14.8% | 14.1% | 7.7% | 2.9% | 4507 |
| Cali | 68.9% | 12.7% | 10.3% | 4.2% | 3.8% | 14472 |
| Caquetá | 59.5% | 16.0% | 12.9% | 8.6% | 2.9% | 2765 |
| Cartagena | 61.9% | 14.5% | 11.0% | 7.1% | 5.5% | 8117 |
| Cartago | 66.2% | 12.7% | 11.5% | 4.9% | 4.7% | 810 |
| Casanare | 52.6% | 19.2% | 15.6% | 8.3% | 4.3% | 2226 |
| Cauca | 58.8% | 17.0% | 11.8% | 7.8% | 4.6% | 9633 |
| Cesar | 57.6% | 17.3% | 12.1% | 8.4% | 4.7% | 6653 |
| Chocó | 46.7% | 16.9% | 15.9% | 12.3% | 8.2% | 3467 |
| Chía | 72.9% | 10.9% | 9.3% | 3.6% | 3.2% | 961 |
| Ciénaga | 64.3% | 12.2% | 9.5% | 6.4% | 7.6% | 1145 |
| Cundinamarca | 64.0% | 15.1% | 12.2% | 5.7% | 3.0% | 11913 |
| Córdoba | 48.2% | 19.7% | 15.3% | 11.2% | 5.7% | 9883 |
| Cúcuta | 63.1% | 16.1% | 12.9% | 5.1% | 2.7% | 5554 |
| Dosquebradas | 66.4% | 13.0% | 10.5% | 4.9% | 5.3% | 1195 |
| Duitama | 74.6% | 11.6% | 8.1% | 5.1% | 0.7% | 1002 |
| Envigado | 78.0% | 9.0% | 7.1% | 3.3% | 2.6% | 989 |
| Facatativá | 67.7% | 13.2% | 9.7% | 4.4% | 5.0% | 1082 |
| Florencia | 53.6% | 19.6% | 14.8% | 7.0% | 4.9% | 1576 |
| Floridablanca | 70.6% | 14.3% | 8.5% | 4.0% | 2.6% | 1916 |
| Fusagasugá | 67.5% | 11.7% | 13.2% | 5.0% | 2.6% | 1029 |
| Girardot | 60.0% | 12.8% | 15.4% | 6.3% | 5.5% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 64.6% | 14.9% | 12.5% | 6.1% | 1.8% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1 |
| Guaviare | 52.4% | 19.0% | 13.3% | 10.3% | 5.1% | 807 |
| Huila | 59.4% | 17.5% | 12.9% | 7.3% | 2.8% | 6495 |
| Ibagué | 67.1% | 14.1% | 10.6% | 4.6% | 3.6% | 3875 |
| Ipiales | 65.1% | 15.1% | 11.0% | 6.5% | 2.3% | 1060 |
| Itagüí | 64.0% | 14.2% | 11.5% | 7.2% | 3.1% | 1337 |
| Jamundí | 62.4% | 16.8% | 11.5% | 5.7% | 3.6% | 814 |
| La Guajira | 53.6% | 17.9% | 13.5% | 8.8% | 6.2% | 3167 |
| Lorica | 51.2% | 19.3% | 13.4% | 11.5% | 4.6% | 1210 |
| Magangué | 44.3% | 19.4% | 16.9% | 12.3% | 7.0% | 1322 |
| Magdalena | 48.6% | 17.4% | 14.1% | 11.3% | 8.6% | 6777 |
| Maicao | 48.6% | 19.6% | 14.6% | 9.4% | 7.8% | 1599 |
| Malambo | 60.5% | 13.2% | 13.7% | 6.0% | 6.6% | 1034 |
| Manizales | 68.0% | 13.8% | 10.3% | 4.5% | 3.3% | 2465 |
| Medellín | 64.3% | 13.2% | 11.8% | 5.4% | 5.3% | 15391 |
| Meta | 55.6% | 17.0% | 15.1% | 7.9% | 4.4% | 4323 |
| Montería | 52.4% | 18.1% | 14.6% | 9.1% | 5.9% | 3814 |
| Mosquera | 71.0% | 13.7% | 9.8% | 3.3% | 2.2% | 854 |
| Nariño | 63.1% | 16.7% | 10.2% | 6.0% | 4.1% | 7668 |
| Neiva | 62.4% | 15.1% | 12.6% | 6.2% | 3.6% | 2915 |
| Norte de Santander | 62.0% | 16.5% | 13.3% | 5.5% | 2.8% | 6070 |
| Palmira | 71.4% | 11.7% | 10.6% | 3.5% | 2.7% | 2029 |
| Pasto | 65.7% | 15.7% | 9.9% | 5.7% | 2.9% | 3138 |
| Pereira | 65.2% | 12.5% | 11.8% | 5.4% | 5.2% | 3306 |
| Piedecuesta | 68.7% | 14.4% | 11.6% | 2.9% | 2.4% | 1128 |
| Pitalito | 64.2% | 15.5% | 11.1% | 6.0% | 3.1% | 1277 |
| Popayán | 64.0% | 14.1% | 13.0% | 5.6% | 3.3% | 2112 |
| Putumayo | 53.2% | 18.9% | 15.4% | 8.7% | 3.7% | 3178 |
| Quibdó | 51.4% | 16.7% | 14.8% | 10.4% | 6.7% | 1102 |
| Quindío | 58.6% | 16.3% | 12.4% | 7.6% | 5.2% | 2048 |
| Riohacha | 53.8% | 17.7% | 13.4% | 8.9% | 6.1% | 2025 |
| Rionegro | 62.0% | 17.0% | 11.8% | 7.4% | 1.8% | 813 |
| Risaralda | 57.9% | 17.1% | 13.7% | 7.9% | 3.4% | 2286 |
| Sabaneta | 77.2% | 10.3% | 7.6% | 3.3% | 1.5% | 329 |
| Sahagún | 54.3% | 16.0% | 15.7% | 9.0% | 4.9% | 997 |
| San Andrés | 49.5% | 20.3% | 14.4% | 11.7% | 4.1% | 418 |
| Santa Marta | 60.9% | 16.2% | 10.7% | 7.0% | 5.2% | 4045 |
| Santander | 62.8% | 16.3% | 12.6% | 6.1% | 2.2% | 6363 |

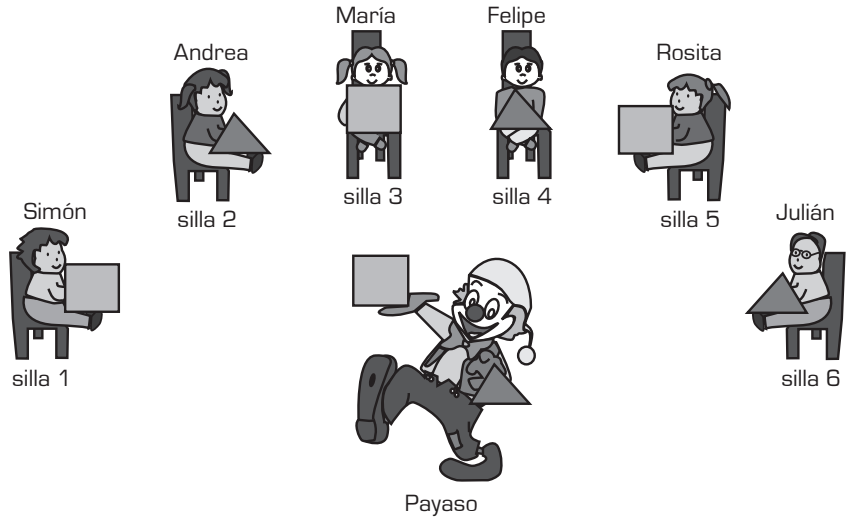
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 58.1% | 16.4% | 13.2% | 7.7% | 4.5% | 2578 |
| Soacha | 68.1% | 13.8% | 9.9% | 5.2% | 3.0% | 4048 |
| Sogamoso | 65.3% | 15.4% | 13.0% | 4.6% | 1.8% | 1119 |
| Soledad | 65.4% | 15.0% | 10.7% | 6.0% | 3.0% | 3865 |
| Sucre | 46.9% | 20.1% | 15.2% | 11.8% | 5.9% | 6080 |
| Tolima | 56.6% | 16.8% | 14.0% | 8.7% | 3.9% | 7517 |
| Tuluá | 67.9% | 13.9% | 10.3% | 4.9% | 2.9% | 1638 |
| Tumaco | 47.9% | 17.5% | 13.4% | 10.6% | 10.6% | 2161 |
| Tunja | 68.6% | 14.2% | 10.5% | 4.5% | 2.2% | 1288 |
| Turbo | 47.1% | 17.1% | 16.4% | 12.4% | 6.9% | 1473 |
| Uribia | 41.2% | 19.6% | 17.8% | 12.6% | 8.8% | 729 |
| Valle del Cauca | 60.5% | 16.4% | 12.7% | 6.3% | 4.0% | 6460 |
| Valledupar | 60.4% | 15.9% | 12.6% | 6.2% | 5.0% | 3519 |
| Vaupés | 33.3% | 16.7% | 0.0% | 0.0% | 50.0% | 6 |
| Vichada | 50.1% | 16.4% | 16.9% | 11.2% | 5.3% | 543 |
| Villavicencio | 67.2% | 14.3% | 11.3% | 4.6% | 2.6% | 4133 |
| Yopal | 60.0% | 14.7% | 12.8% | 7.3% | 5.3% | 1346 |
| Yumbo | 58.1% | 18.4% | 11.9% | 6.6% | 4.9% | 933 |
| Zipaquirá | 72.0% | 12.3% | 8.9% | 4.3% | 2.5% | 987 |
| Colombia | 61.1% | 15.6% | 12.0% | 6.8% | 4.5% | 369410 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 17.

En una fiesta, el payaso le entregó una figura a cada invitado para realizar una actividad.




¿Quiénes tienen cuadrados?

A. Solamente las niñas.
B. Solamente los niños.
C. Los que están sentados en sillas pares.
D. Los que están sentados en sillas impares.

## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Numérico - variacional |
| **Afirmación** | Establecer conjeturas acerca de regularidades en contextos geométricos y numéricos. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | D |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 22.9% | 7.1% | 15.9% | 51.6% | 2.5% | 800 |
| Antioquia | 17.6% | 6.1% | 19.1% | 55.0% | 2.3% | 22998 |
| Apartadó | 23.4% | 7.4% | 18.3% | 48.5% | 2.5% | 1358 |
| Arauca | 18.2% | 5.6% | 18.9% | 55.4% | 2.0% | 2079 |
| Armenia | 16.9% | 4.5% | 22.2% | 55.5% | 0.8% | 1915 |
| Atlántico | 20.8% | 7.1% | 17.9% | 50.5% | 3.7% | 4465 |
| Barrancabermeja | 14.9% | 4.6% | 21.6% | 56.3% | 2.6% | 1796 |
| Barranquilla | 17.8% | 5.1% | 21.6% | 52.8% | 2.6% | 7800 |
| Bello | 13.3% | 4.0% | 22.9% | 58.6% | 1.2% | 2933 |
| Bogotá, D.C. | 12.1% | 3.0% | 19.7% | 62.8% | 2.3% | 47936 |
| Bolívar | 25.2% | 10.6% | 18.7% | 41.3% | 4.2% | 8304 |
| Boyacá | 16.4% | 5.8% | 22.6% | 54.1% | 1.1% | 6892 |
| Bucaramanga | 11.5% | 3.6% | 19.0% | 65.2% | 0.8% | 3830 |
| Buenaventura | 16.0% | 5.8% | 14.9% | 60.9% | 2.5% | 2848 |
| Buga | 16.8% | 4.3% | 20.7% | 54.9% | 3.4% | 822 |
| Caldas | 17.0% | 5.8% | 18.2% | 57.3% | 1.6% | 4508 |
| Cali | 14.1% | 3.9% | 19.9% | 60.0% | 2.2% | 14474 |
| Caquetá | 18.9% | 6.6% | 17.8% | 54.8% | 1.9% | 2765 |
| Cartagena | 16.3% | 5.7% | 18.0% | 57.1% | 2.9% | 8114 |
| Cartago | 18.7% | 4.6% | 18.6% | 56.0% | 2.1% | 811 |
| Casanare | 20.9% | 5.9% | 22.2% | 49.3% | 1.6% | 2226 |
| Cauca | 16.4% | 6.6% | 14.6% | 59.4% | 2.9% | 9635 |
| Cesar | 19.6% | 7.2% | 16.4% | 53.8% | 2.9% | 6652 |
| Chocó | 22.9% | 8.8% | 16.3% | 47.1% | 5.0% | 3467 |
| Chía | 10.8% | 2.6% | 19.9% | 65.3% | 1.4% | 961 |
| Ciénaga | 13.7% | 6.3% | 19.0% | 55.7% | 5.3% | 1144 |
| Cundinamarca | 13.6% | 4.2% | 19.7% | 61.2% | 1.4% | 11911 |
| Córdoba | 23.2% | 8.3% | 17.6% | 47.5% | 3.4% | 9883 |
| Cúcuta | 17.7% | 4.8% | 21.8% | 54.8% | 1.0% | 5554 |
| Dosquebradas | 15.9% | 3.8% | 22.4% | 56.1% | 1.8% | 1196 |
| Duitama | 8.6% | 1.9% | 18.9% | 70.2% | 0.4% | 1001 |
| Envigado | 6.3% | 2.5% | 19.2% | 71.0% | 1.0% | 989 |
| Facatativá | 14.3% | 2.9% | 17.9% | 62.2% | 2.7% | 1083 |
| Florencia | 22.2% | 7.1% | 19.7% | 48.9% | 2.2% | 1576 |
| Floridablanca | 11.6% | 2.7% | 20.5% | 64.2% | 0.9% | 1916 |
| Fusagasugá | 14.3% | 3.6% | 24.5% | 56.2% | 1.5% | 1029 |
| Girardot | 20.3% | 6.8% | 20.3% | 49.3% | 3.2% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 14.5% | 3.8% | 24.1% | 56.8% | 0.8% | 1046 |
| Guainía | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 2 |
| Guaviare | 21.9% | 6.4% | 20.6% | 48.7% | 2.4% | 807 |
| Huila | 18.3% | 6.4% | 19.6% | 54.2% | 1.5% | 6495 |
| Ibagué | 14.9% | 4.7% | 20.9% | 57.6% | 1.8% | 3872 |
| Ipiales | 13.4% | 4.1% | 16.1% | 65.5% | 0.9% | 1059 |
| Itagüí | 11.5% | 4.4% | 22.6% | 59.6% | 1.8% | 1338 |
| Jamundí | 15.9% | 4.6% | 20.0% | 57.7% | 1.8% | 813 |
| La Guajira | 19.6% | 8.4% | 16.2% | 53.2% | 2.6% | 3168 |
| Lorica | 23.6% | 8.3% | 17.5% | 47.8% | 2.7% | 1210 |
| Magangué | 30.6% | 10.1% | 19.4% | 36.8% | 3.1% | 1322 |
| Magdalena | 23.4% | 8.5% | 15.4% | 47.4% | 5.3% | 6778 |
| Maicao | 22.4% | 9.4% | 18.5% | 46.7% | 3.1% | 1598 |
| Malambo | 17.9% | 6.8% | 15.0% | 56.7% | 3.7% | 1034 |
| Manizales | 13.7% | 3.5% | 21.6% | 60.2% | 1.0% | 2464 |
| Medellín | 14.7% | 4.2% | 22.0% | 57.1% | 1.9% | 15397 |
| Meta | 18.1% | 6.0% | 21.9% | 51.4% | 2.6% | 4322 |
| Montería | 20.5% | 6.2% | 21.7% | 48.3% | 3.3% | 3813 |
| Mosquera | 12.4% | 2.8% | 20.0% | 64.0% | 0.7% | 853 |
| Nariño | 15.1% | 4.9% | 16.2% | 61.1% | 2.7% | 7671 |
| Neiva | 18.6% | 5.0% | 20.4% | 54.3% | 1.7% | 2916 |
| Norte de Santander | 15.3% | 4.9% | 19.0% | 59.6% | 1.2% | 6070 |
| Palmira | 14.1% | 3.8% | 22.9% | 57.4% | 1.8% | 2029 |
| Pasto | 13.3% | 3.0% | 20.1% | 62.8% | 0.8% | 3139 |
| Pereira | 16.8% | 4.2% | 21.5% | 55.7% | 1.8% | 3308 |
| Piedecuesta | 12.3% | 2.5% | 22.1% | 61.8% | 1.3% | 1127 |
| Pitalito | 17.0% | 5.9% | 22.1% | 53.8% | 1.3% | 1278 |
| Popayán | 12.3% | 5.3% | 18.6% | 62.3% | 1.5% | 2111 |
| Putumayo | 18.4% | 6.0% | 21.6% | 52.4% | 1.6% | 3175 |
| Quibdó | 19.4% | 6.2% | 18.5% | 50.5% | 5.5% | 1100 |
| Quindío | 17.6% | 5.6% | 19.9% | 54.7% | 2.2% | 2049 |
| Riohacha | 19.7% | 6.9% | 18.0% | 52.7% | 2.7% | 2024 |
| Rionegro | 10.6% | 4.4% | 21.6% | 62.8% | 0.6% | 812 |
| Risaralda | 18.7% | 6.7% | 21.1% | 51.0% | 2.5% | 2284 |
| Sabaneta | 10.0% | 1.5% | 17.3% | 70.3% | 0.9% | 330 |
| Sahagún | 20.8% | 7.1% | 20.4% | 49.1% | 2.6% | 997 |
| San Andrés | 21.1% | 7.4% | 20.6% | 47.6% | 3.3% | 418 |
| Santa Marta | 17.4% | 6.9% | 20.4% | 52.1% | 3.1% | 4045 |
| Santander | 14.2% | 4.5% | 18.5% | 62.0% | 0.7% | 6364 |

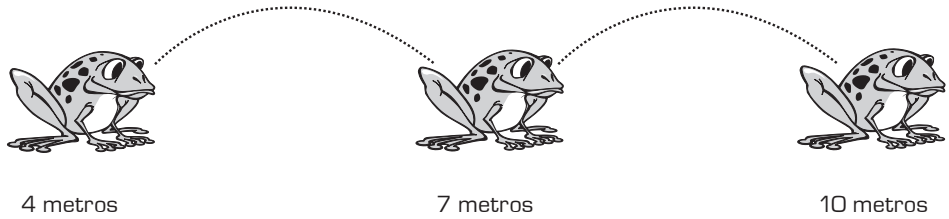
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 17.7% | 6.3% | 20.8% | 52.9% | 2.3% | 2577 |
| Soacha | 13.1% | 3.6% | 22.5% | 59.8% | 1.1% | 4049 |
| Sogamoso | 11.6% | 3.0% | 23.0% | 61.9% | 0.4% | 1118 |
| Soledad | 16.9% | 4.5% | 21.0% | 56.1% | 1.5% | 3865 |
| Sucre | 25.3% | 9.4% | 18.5% | 43.8% | 3.0% | 6081 |
| Tolima | 18.8% | 7.0% | 19.1% | 52.8% | 2.3% | 7516 |
| Tuluá | 13.0% | 4.3% | 20.0% | 61.2% | 1.5% | 1638 |
| Tumaco | 21.9% | 9.2% | 16.3% | 46.5% | 6.2% | 2161 |
| Tunja | 11.3% | 2.2% | 19.4% | 66.2% | 0.9% | 1288 |
| Turbo | 24.2% | 9.2% | 18.6% | 44.0% | 4.0% | 1474 |
| Uribia | 24.8% | 12.5% | 16.6% | 39.6% | 6.4% | 729 |
| Valle del Cauca | 17.3% | 4.8% | 20.4% | 55.0% | 2.4% | 6459 |
| Valledupar | 19.4% | 6.5% | 17.3% | 53.3% | 3.5% | 3519 |
| Vaupés | 40.0% | 0.0% | 0.0% | 0.0% | 60.0% | 5 |
| Vichada | 18.4% | 7.4% | 18.2% | 52.5% | 3.5% | 543 |
| Villavicencio | 14.8% | 3.8% | 19.9% | 60.3% | 1.3% | 4132 |
| Yopal | 18.7% | 3.7% | 23.6% | 52.2% | 1.7% | 1346 |
| Yumbo | 16.6% | 6.2% | 22.5% | 52.7% | 1.9% | 933 |
| Zipaquirá | 12.2% | 2.6% | 19.5% | 65.0% | 0.7% | 987 |
| Colombia | 16.7% | 5.4% | 19.4% | 56.2% | 2.3% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 18.

Observa los saltos que da la rana.




¿Cuántos metros avanza la rana en cada salto?

A. 3 metros.

B. 4 metros.

C. 10 metros.

D. 13 metros.

## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Numérico - variacional |
| **Afirmación** | Establecer conjeturas acerca de regularidades en contextos geométricos y numéricos |
| **Nivel de desempeño** | Avanzado |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 33.6% | 17.0% | 33.4% | 12.6% | 3.4% | 800 |
| Antioquia | 38.7% | 16.5% | 30.8% | 11.4% | 2.6% | 22998 |
| Apartadó | 34.9% | 19.0% | 30.6% | 12.2% | 3.3% | 1358 |
| Arauca | 41.3% | 17.6% | 29.2% | 9.9% | 2.1% | 2079 |
| Armenia | 39.1% | 16.5% | 33.7% | 9.8% | 0.9% | 1915 |
| Atlántico | 45.4% | 14.0% | 26.2% | 10.7% | 3.7% | 4465 |
| Barrancabermeja | 39.4% | 16.0% | 32.0% | 10.2% | 2.4% | 1796 |
| Barranquilla | 39.7% | 14.2% | 32.3% | 10.9% | 2.9% | 7800 |
| Bello | 39.0% | 14.8% | 32.3% | 12.2% | 1.7% | 2933 |
| Bogotá, D.C. | 43.0% | 13.4% | 29.8% | 11.3% | 2.5% | 47936 |
| Bolívar | 31.8% | 17.7% | 30.3% | 15.0% | 5.2% | 8304 |
| Boyacá | 36.6% | 19.7% | 31.8% | 10.4% | 1.5% | 6892 |
| Bucaramanga | 49.5% | 13.9% | 25.7% | 9.7% | 1.3% | 3830 |
| Buenaventura | 45.0% | 13.1% | 28.7% | 9.7% | 3.5% | 2848 |
| Buga | 39.3% | 13.7% | 31.5% | 11.2% | 4.3% | 822 |
| Caldas | 40.2% | 16.9% | 30.2% | 10.7% | 2.0% | 4508 |
| Cali | 44.6% | 13.3% | 30.2% | 9.6% | 2.4% | 14474 |
| Caquetá | 45.2% | 16.4% | 26.6% | 9.6% | 2.2% | 2765 |
| Cartagena | 44.1% | 12.8% | 30.2% | 9.8% | 3.2% | 8114 |
| Cartago | 36.4% | 16.0% | 33.3% | 11.8% | 2.5% | 811 |
| Casanare | 35.4% | 19.9% | 31.0% | 11.7% | 2.0% | 2226 |
| Cauca | 48.1% | 14.3% | 24.4% | 10.0% | 3.2% | 9635 |
| Cesar | 44.0% | 16.1% | 26.2% | 10.6% | 3.0% | 6652 |
| Chocó | 38.0% | 14.4% | 27.5% | 14.6% | 5.5% | 3467 |
| Chía | 45.0% | 11.0% | 33.1% | 9.7% | 1.2% | 961 |
| Ciénaga | 51.3% | 14.3% | 22.6% | 6.6% | 5.2% | 1144 |
| Cundinamarca | 42.6% | 16.2% | 29.9% | 9.7% | 1.6% | 11911 |
| Córdoba | 39.1% | 17.3% | 27.2% | 12.6% | 3.8% | 9883 |
| Cúcuta | 38.7% | 17.2% | 31.1% | 11.5% | 1.4% | 5554 |
| Dosquebradas | 34.9% | 15.9% | 33.8% | 12.9% | 2.6% | 1196 |
| Duitama | 55.7% | 11.9% | 23.8% | 8.2% | 0.4% | 1001 |
| Envigado | 52.6% | 10.1% | 24.8% | 11.5% | 1.0% | 989 |
| Facatativá | 41.9% | 13.4% | 30.4% | 11.2% | 3.1% | 1083 |
| Florencia | 35.2% | 19.9% | 33.5% | 9.7% | 1.7% | 1576 |
| Floridablanca | 47.8% | 13.7% | 26.1% | 11.6% | 0.8% | 1916 |
| Fusagasugá | 36.1% | 14.4% | 35.1% | 13.1% | 1.4% | 1029 |
| Girardot | 33.3% | 18.2% | 35.2% | 10.5% | 2.9% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 40.2% | 14.4% | 29.2% | 15.4% | 0.8% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2 |
| Guaviare | 38.4% | 18.5% | 32.6% | 7.9% | 2.6% | 807 |
| Huila | 38.0% | 19.0% | 31.0% | 10.4% | 1.5% | 6495 |
| Ibagué | 41.7% | 15.3% | 31.3% | 9.7% | 2.0% | 3872 |
| Ipiales | 42.6% | 14.5% | 31.7% | 9.7% | 1.4% | 1059 |
| Itagüí | 38.1% | 15.2% | 32.7% | 11.7% | 2.2% | 1338 |
| Jamundí | 35.2% | 16.1% | 35.8% | 9.8% | 3.1% | 813 |
| La Guajira | 44.2% | 14.7% | 25.5% | 11.8% | 3.9% | 3168 |
| Lorica | 37.9% | 17.0% | 28.6% | 13.5% | 3.1% | 1210 |
| Magangué | 29.2% | 18.3% | 32.1% | 16.9% | 3.5% | 1322 |
| Magdalena | 40.6% | 14.9% | 25.9% | 12.8% | 5.8% | 6778 |
| Maicao | 37.7% | 15.2% | 30.4% | 13.5% | 3.2% | 1598 |
| Malambo | 49.8% | 13.1% | 25.0% | 9.0% | 3.1% | 1034 |
| Manizales | 40.7% | 13.7% | 31.5% | 12.9% | 1.2% | 2464 |
| Medellín | 35.3% | 15.7% | 35.1% | 11.7% | 2.2% | 15397 |
| Meta | 35.2% | 19.5% | 32.6% | 9.9% | 2.8% | 4322 |
| Montería | 35.1% | 16.4% | 31.7% | 12.8% | 4.0% | 3813 |
| Mosquera | 43.0% | 12.8% | 32.5% | 10.7% | 1.1% | 853 |
| Nariño | 49.3% | 14.4% | 24.1% | 9.3% | 2.9% | 7671 |
| Neiva | 35.5% | 17.1% | 33.6% | 12.3% | 1.4% | 2916 |
| Norte de Santander | 44.1% | 16.3% | 29.3% | 8.6% | 1.7% | 6070 |
| Palmira | 40.3% | 14.9% | 31.7% | 10.8% | 2.3% | 2029 |
| Pasto | 45.7% | 13.3% | 28.1% | 11.7% | 1.2% | 3139 |
| Pereira | 37.2% | 16.4% | 34.4% | 9.7% | 2.2% | 3308 |
| Piedecuesta | 47.5% | 11.9% | 28.7% | 10.3% | 1.6% | 1127 |
| Pitalito | 35.6% | 19.4% | 31.7% | 11.2% | 2.1% | 1278 |
| Popayán | 40.8% | 14.5% | 33.3% | 9.7% | 1.7% | 2111 |
| Putumayo | 36.9% | 17.9% | 32.5% | 10.6% | 2.2% | 3175 |
| Quibdó | 42.2% | 12.5% | 28.5% | 10.8% | 5.9% | 1100 |
| Quindío | 38.3% | 17.3% | 32.5% | 9.7% | 2.2% | 2049 |
| Riohacha | 47.4% | 13.0% | 25.6% | 9.9% | 4.1% | 2024 |
| Rionegro | 47.2% | 13.3% | 25.6% | 12.8% | 1.1% | 812 |
| Risaralda | 35.9% | 18.0% | 32.4% | 11.4% | 2.5% | 2284 |
| Sabaneta | 47.3% | 14.8% | 24.5% | 12.1% | 1.2% | 330 |
| Sahagún | 38.1% | 16.0% | 31.9% | 11.2% | 2.7% | 997 |
| San Andrés | 34.2% | 18.7% | 30.4% | 15.3% | 1.4% | 418 |
| Santa Marta | 38.4% | 15.5% | 32.6% | 10.1% | 3.4% | 4045 |
| Santander | 45.4% | 15.9% | 27.5% | 10.3% | 1.0% | 6364 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 41.1% | 13.8% | 30.9% | 12.0% | 2.1% | 2577 |
| Soacha | 38.6% | 15.3% | 34.2% | 10.8% | 1.1% | 4049 |
| Sogamoso | 43.7% | 14.8% | 29.7% | 11.4% | 0.4% | 1118 |
| Soledad | 44.9% | 13.6% | 30.2% | 9.8% | 1.6% | 3865 |
| Sucre | 37.8% | 16.9% | 27.6% | 14.1% | 3.5% | 6081 |
| Tolima | 39.9% | 17.8% | 29.4% | 10.3% | 2.6% | 7516 |
| Tuluá | 43.2% | 13.4% | 31.4% | 10.1% | 2.0% | 1638 |
| Tumaco | 39.8% | 14.3% | 26.0% | 12.0% | 7.9% | 2161 |
| Tunja | 48.7% | 13.6% | 25.5% | 11.2% | 1.0% | 1288 |
| Turbo | 34.3% | 18.3% | 30.8% | 12.8% | 3.8% | 1474 |
| Uribia | 32.2% | 17.1% | 26.2% | 18.2% | 6.2% | 729 |
| Valle del Cauca | 35.4% | 17.6% | 33.4% | 11.0% | 2.6% | 6459 |
| Valledupar | 41.1% | 13.7% | 30.8% | 10.5% | 3.9% | 3519 |
| Vaupés | 0.0% | 0.0% | 40.0% | 0.0% | 60.0% | 5 |
| Vichada | 41.8% | 14.0% | 26.9% | 14.0% | 3.3% | 543 |
| Villavicencio | 41.6% | 15.8% | 31.3% | 10.0% | 1.3% | 4132 |
| Yopal | 36.2% | 17.1% | 34.0% | 10.8% | 2.0% | 1346 |
| Yumbo | 34.3% | 16.9% | 35.4% | 11.1% | 2.3% | 933 |
| Zipaquirá | 51.8% | 10.8% | 27.3% | 9.5% | 0.6% | 987 |
| Colombia | 40.9% | 15.5% | 30.0% | 11.1% | 2.6% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 19.

En una escuela deportiva, el año pasado había 45 inscritos. Este año hay 69. Eso significa que del año pasado a este

A. se retiraron 14 personas.
B. se inscribieron 14 personas más.
C. se retiraron 24 personas.
D. se inscribieron 24 personas más.

## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Numérico - variacional |
| **Afirmación** | Resolver problemas aditivos rutinarios de composición y transformación e interpretar condiciones necesarias para su solución. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | D |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 8.5% | 16.5% | 15.9% | 56.0% | 3.1% | 800 |
| Antioquia | 7.8% | 12.9% | 17.3% | 58.8% | 3.2% | 22998 |
| Apartadó | 8.7% | 14.7% | 17.0% | 56.3% | 3.3% | 1358 |
| Arauca | 7.5% | 12.4% | 16.3% | 61.4% | 2.4% | 2079 |
| Armenia | 8.2% | 13.0% | 21.5% | 56.2% | 1.1% | 1915 |
| Atlántico | 8.6% | 14.6% | 19.7% | 52.3% | 4.9% | 4465 |
| Barrancabermeja | 7.6% | 10.8% | 18.6% | 59.9% | 3.2% | 1796 |
| Barranquilla | 7.0% | 12.2% | 18.2% | 59.3% | 3.3% | 7800 |
| Bello | 6.6% | 11.3% | 18.6% | 61.9% | 1.6% | 2933 |
| Bogotá, D.C. | 6.1% | 11.2% | 18.8% | 61.0% | 2.8% | 47936 |
| Bolívar | 10.3% | 15.6% | 19.7% | 48.6% | 5.8% | 8304 |
| Boyacá | 8.3% | 13.3% | 17.7% | 59.1% | 1.6% | 6892 |
| Bucaramanga | 5.8% | 10.2% | 18.9% | 63.6% | 1.4% | 3830 |
| Buenaventura | 6.9% | 10.9% | 17.1% | 61.4% | 3.6% | 2848 |
| Buga | 6.4% | 11.8% | 16.9% | 60.1% | 4.7% | 822 |
| Caldas | 7.2% | 11.9% | 18.6% | 59.8% | 2.5% | 4508 |
| Cali | 6.8% | 11.5% | 18.4% | 60.5% | 2.8% | 14474 |
| Caquetá | 7.6% | 14.5% | 17.3% | 58.2% | 2.5% | 2765 |
| Cartagena | 7.6% | 12.7% | 19.9% | 55.8% | 4.0% | 8114 |
| Cartago | 7.2% | 12.5% | 17.5% | 59.4% | 3.5% | 811 |
| Casanare | 9.1% | 12.8% | 16.0% | 59.5% | 2.6% | 2226 |
| Cauca | 6.5% | 11.1% | 17.9% | 60.0% | 4.5% | 9635 |
| Cesar | 7.7% | 12.0% | 18.4% | 58.2% | 3.7% | 6652 |
| Chocó | 9.0% | 14.6% | 16.4% | 53.4% | 6.7% | 3467 |
| Chía | 6.5% | 10.5% | 16.5% | 65.5% | 1.0% | 961 |
| Ciénaga | 6.6% | 11.2% | 20.1% | 55.4% | 6.6% | 1144 |
| Cundinamarca | 6.1% | 11.6% | 18.0% | 62.5% | 1.8% | 11911 |
| Córdoba | 8.9% | 14.8% | 19.1% | 52.9% | 4.3% | 9883 |
| Cúcuta | 7.7% | 10.8% | 20.1% | 59.5% | 1.8% | 5554 |
| Dosquebradas | 7.3% | 10.6% | 20.5% | 58.4% | 3.2% | 1196 |
| Duitama | 4.1% | 7.7% | 19.5% | 68.3% | 0.4% | 1001 |
| Envigado | 4.3% | 10.5% | 14.3% | 69.5% | 1.4% | 989 |
| Facatativá | 5.4% | 10.9% | 18.9% | 61.0% | 3.7% | 1083 |
| Florencia | 8.0% | 13.6% | 19.9% | 56.3% | 2.2% | 1576 |
| Floridablanca | 6.3% | 10.3% | 17.4% | 64.7% | 1.4% | 1916 |
| Fusagasugá | 6.2% | 11.1% | 18.8% | 62.5% | 1.5% | 1029 |
| Girardot | 9.7% | 12.6% | 17.9% | 57.0% | 2.8% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 8.8% | 11.1% | 19.5% | 59.8% | 0.9% | 1046 |
| Guainía | 0.0% | 0.0% | 50.0% | 50.0% | 0.0% | 2 |
| Guaviare | 8.7% | 13.3% | 16.2% | 57.6% | 4.2% | 807 |
| Huila | 7.8% | 14.0% | 17.7% | 58.4% | 2.1% | 6495 |
| Ibagué | 6.6% | 10.6% | 20.5% | 59.7% | 2.6% | 3872 |
| Ipiales | 5.6% | 10.6% | 21.1% | 61.1% | 1.7% | 1059 |
| Itagüí | 8.7% | 12.5% | 16.2% | 60.4% | 2.2% | 1338 |
| Jamundí | 7.9% | 13.8% | 20.3% | 54.6% | 3.4% | 813 |
| La Guajira | 8.3% | 13.7% | 20.2% | 53.3% | 4.5% | 3168 |
| Lorica | 9.4% | 14.5% | 19.9% | 52.3% | 3.8% | 1210 |
| Magangué | 12.6% | 16.7% | 19.9% | 46.7% | 4.2% | 1322 |
| Magdalena | 8.6% | 14.0% | 17.2% | 53.1% | 7.0% | 6778 |
| Maicao | 8.3% | 16.8% | 18.0% | 52.6% | 4.4% | 1598 |
| Malambo | 6.5% | 11.9% | 15.0% | 61.6% | 5.0% | 1034 |
| Manizales | 6.6% | 11.4% | 19.0% | 61.0% | 1.9% | 2464 |
| Medellín | 7.7% | 12.3% | 18.2% | 59.2% | 2.6% | 15397 |
| Meta | 8.0% | 13.7% | 18.4% | 56.6% | 3.2% | 4322 |
| Montería | 9.9% | 14.0% | 20.0% | 52.2% | 3.9% | 3813 |
| Mosquera | 5.0% | 10.1% | 15.9% | 67.2% | 1.8% | 853 |
| Nariño | 5.9% | 11.5% | 16.7% | 62.4% | 3.5% | 7671 |
| Neiva | 8.6% | 13.6% | 21.7% | 54.1% | 2.0% | 2916 |
| Norte de Santander | 7.4% | 11.8% | 18.0% | 61.0% | 1.8% | 6070 |
| Palmira | 5.7% | 11.9% | 19.4% | 60.8% | 2.3% | 2029 |
| Pasto | 5.4% | 11.1% | 20.3% | 61.9% | 1.3% | 3139 |
| Pereira | 7.4% | 12.0% | 18.9% | 59.4% | 2.3% | 3308 |
| Piedecuesta | 5.3% | 10.8% | 18.8% | 63.2% | 1.9% | 1127 |
| Pitalito | 8.0% | 12.4% | 17.1% | 60.3% | 2.2% | 1278 |
| Popayán | 5.8% | 11.4% | 19.1% | 61.9% | 1.8% | 2111 |
| Putumayo | 8.2% | 13.4% | 20.3% | 55.6% | 2.4% | 3175 |
| Quibdó | 9.0% | 13.6% | 13.9% | 57.5% | 6.0% | 1100 |
| Quindío | 8.2% | 12.5% | 18.7% | 57.9% | 2.6% | 2049 |
| Riohacha | 8.1% | 12.7% | 18.5% | 56.4% | 4.2% | 2024 |
| Rionegro | 5.2% | 12.4% | 17.4% | 64.5% | 0.5% | 812 |
| Risaralda | 7.7% | 14.3% | 19.9% | 55.1% | 3.0% | 2284 |
| Sabaneta | 4.2% | 10.3% | 19.7% | 64.8% | 0.9% | 330 |
| Sahagún | 7.4% | 15.7% | 19.6% | 53.6% | 3.7% | 997 |
| San Andrés | 13.2% | 12.2% | 20.3% | 52.6% | 1.7% | 418 |
| Santa Marta | 7.7% | 12.4% | 20.2% | 55.4% | 4.3% | 4045 |
| Santander | 6.3% | 12.3% | 18.6% | 61.4% | 1.4% | 6364 |

Continúa en la siguiente página

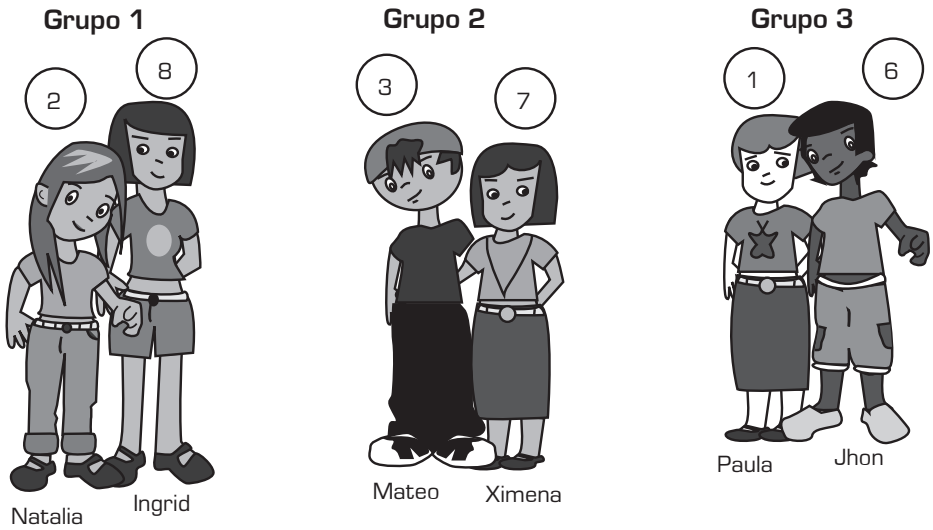
| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 8.7% | 12.0% | 19.3% | 57.5% | 2.5% | 2577 |
| Soacha | 6.4% | 11.9% | 20.2% | 59.8% | 1.7% | 4049 |
| Sogamoso | 5.5% | 10.8% | 16.8% | 66.3% | 0.5% | 1118 |
| Soledad | 8.3% | 12.7% | 19.4% | 57.4% | 2.4% | 3865 |
| Sucre | 8.6% | 14.6% | 19.0% | 53.3% | 4.5% | 6081 |
| Tolima | 7.5% | 13.9% | 18.2% | 57.2% | 3.2% | 7516 |
| Tuluá | 6.0% | 11.4% | 17.4% | 63.0% | 2.1% | 1638 |
| Tumaco | 8.7% | 12.8% | 18.3% | 51.4% | 8.8% | 2161 |
| Tunja | 4.3% | 10.2% | 17.5% | 67.1% | 0.9% | 1288 |
| Turbo | 10.9% | 14.3% | 15.9% | 54.3% | 4.5% | 1474 |
| Uribia | 11.4% | 18.2% | 18.8% | 42.5% | 9.1% | 729 |
| Valle del Cauca | 6.8% | 12.5% | 17.6% | 59.9% | 3.2% | 6459 |
| Valledupar | 8.0% | 13.1% | 17.2% | 57.4% | 4.3% | 3519 |
| Vaupés | 0.0% | 0.0% | 0.0% | 40.0% | 60.0% | 5 |
| Vichada | 9.6% | 13.8% | 14.7% | 58.7% | 3.1% | 543 |
| Villavicencio | 6.0% | 11.2% | 18.4% | 62.8% | 1.7% | 4132 |
| Yopal | 6.0% | 12.3% | 17.3% | 62.0% | 2.5% | 1346 |
| Yumbo | 9.0% | 12.4% | 17.9% | 57.2% | 3.4% | 933 |
| Zipaquirá | 4.7% | 10.4% | 18.6% | 64.3% | 1.9% | 987 |
| Colombia | 7.3% | 12.4% | 18.5% | 58.7% | 3.1% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 20.

En un juego, cada jugador toma una ficha con un número y busca un compañero con otra ficha. Si los números suman 10, el grupo gana.

Estos son los grupos que se formaron con sus respectivas fichas.




¿Cuál o cuáles grupos ganaron?

A. El grupo 1 solamente.
B. El grupo 2 solamente.
C. Los grupos 1 y 2, solamente.
D. Los 3 grupos.

## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Numérico - variacional |
| **Afirmación** | Resolver problemas aditivos rutinarios de composición y transformación e interpretar condiciones necesarias para su solución. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 16.6% | 13.8% | 48.6% | 17.4% | 3.6% | 800 |
| Antioquia | 18.9% | 11.6% | 54.5% | 12.7% | 2.3% | 22998 |
| Apartadó | 22.6% | 13.0% | 50.3% | 11.0% | 3.0% | 1358 |
| Arauca | 18.3% | 11.3% | 56.1% | 12.4% | 2.0% | 2079 |
| Armenia | 17.0% | 11.1% | 61.6% | 9.7% | 0.5% | 1915 |
| Atlántico | 16.8% | 12.7% | 54.1% | 12.9% | 3.5% | 4465 |
| Barrancabermeja | 16.4% | 10.1% | 61.3% | 9.8% | 2.3% | 1796 |
| Barranquilla | 17.2% | 10.2% | 60.2% | 9.8% | 2.5% | 7800 |
| Bello | 18.2% | 9.0% | 63.0% | 8.6% | 1.2% | 2933 |
| Bogotá, D.C. | 14.0% | 8.7% | 68.3% | 6.8% | 2.3% | 47936 |
| Bolívar | 19.9% | 14.2% | 42.9% | 18.3% | 4.7% | 8304 |
| Boyacá | 18.5% | 12.1% | 55.3% | 12.6% | 1.5% | 6892 |
| Bucaramanga | 12.7% | 7.7% | 71.9% | 6.8% | 0.9% | 3830 |
| Buenaventura | 15.4% | 10.8% | 59.2% | 12.1% | 2.5% | 2848 |
| Buga | 17.4% | 9.4% | 60.1% | 9.6% | 3.5% | 822 |
| Caldas | 17.2% | 11.6% | 57.5% | 12.0% | 1.6% | 4508 |
| Cali | 15.5% | 9.3% | 64.8% | 8.3% | 2.1% | 14474 |
| Caquetá | 18.4% | 12.4% | 53.7% | 13.9% | 1.6% | 2765 |
| Cartagena | 15.7% | 11.5% | 59.1% | 10.8% | 2.9% | 8114 |
| Cartago | 19.0% | 10.6% | 58.8% | 9.0% | 2.6% | 811 |
| Casanare | 20.9% | 12.3% | 52.2% | 12.5% | 2.1% | 2226 |
| Cauca | 16.4% | 11.5% | 54.7% | 14.1% | 3.2% | 9635 |
| Cesar | 18.6% | 12.2% | 52.7% | 13.7% | 2.8% | 6652 |
| Chocó | 17.7% | 14.1% | 46.6% | 16.7% | 4.9% | 3467 |
| Chía | 12.8% | 8.4% | 71.4% | 6.3% | 1.0% | 961 |
| Ciénaga | 14.7% | 11.2% | 58.3% | 11.5% | 4.4% | 1144 |
| Cundinamarca | 16.2% | 10.1% | 63.0% | 9.2% | 1.5% | 11911 |
| Córdoba | 18.6% | 13.7% | 47.1% | 17.1% | 3.4% | 9883 |
| Cúcuta | 17.9% | 10.0% | 60.8% | 10.2% | 1.1% | 5554 |
| Dosquebradas | 16.0% | 10.1% | 63.3% | 8.6% | 2.0% | 1196 |
| Duitama | 12.4% | 8.5% | 73.1% | 5.6% | 0.4% | 1001 |
| Envigado | 10.8% | 7.9% | 75.3% | 4.9% | 1.1% | 989 |
| Facatativá | 17.1% | 9.3% | 64.5% | 6.2% | 3.0% | 1083 |
| Florencia | 19.9% | 13.9% | 53.2% | 11.7% | 1.3% | 1576 |
| Floridablanca | 12.9% | 7.5% | 71.7% | 7.0% | 0.8% | 1916 |
| Fusagasugá | 16.9% | 10.9% | 62.6% | 8.4% | 1.3% | 1029 |
| Girardot | 17.9% | 10.6% | 57.6% | 10.8% | 3.2% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 13.1% | 9.9% | 68.8% | 7.3% | 0.9% | 1046 |
| Guainía | 0.0% | 50.0% | 50.0% | 0.0% | 0.0% | 2 |
| Guaviare | 18.7% | 13.6% | 51.2% | 14.3% | 2.2% | 807 |
| Huila | 18.8% | 12.3% | 54.4% | 13.1% | 1.3% | 6495 |
| Ibagué | 14.8% | 10.7% | 63.8% | 8.9% | 1.8% | 3872 |
| Ipiales | 14.3% | 9.3% | 65.0% | 10.4% | 1.1% | 1059 |
| Itagüí | 20.1% | 10.3% | 60.8% | 7.2% | 1.6% | 1338 |
| Jamundí | 18.0% | 11.9% | 55.1% | 12.4% | 2.6% | 813 |
| La Guajira | 18.5% | 11.7% | 51.1% | 15.6% | 3.1% | 3168 |
| Lorica | 17.4% | 15.0% | 46.4% | 18.0% | 3.1% | 1210 |
| Magangué | 20.6% | 16.5% | 39.2% | 19.5% | 4.2% | 1322 |
| Magdalena | 19.6% | 13.4% | 45.4% | 16.7% | 5.0% | 6778 |
| Maicao | 19.5% | 13.6% | 49.3% | 14.7% | 2.9% | 1598 |
| Malambo | 17.2% | 9.3% | 58.7% | 11.4% | 3.4% | 1034 |
| Manizales | 14.7% | 9.5% | 67.2% | 7.5% | 1.0% | 2464 |
| Medellín | 17.9% | 10.7% | 59.7% | 9.5% | 2.2% | 15397 |
| Meta | 20.4% | 12.1% | 53.0% | 12.1% | 2.5% | 4322 |
| Montería | 17.6% | 11.6% | 54.0% | 13.3% | 3.5% | 3813 |
| Mosquera | 14.9% | 8.6% | 68.6% | 7.3% | 0.7% | 853 |
| Nariño | 13.6% | 10.2% | 61.0% | 12.5% | 2.7% | 7671 |
| Neiva | 17.6% | 12.4% | 58.6% | 9.9% | 1.4% | 2916 |
| Norte de Santander | 16.0% | 11.0% | 60.2% | 11.6% | 1.3% | 6070 |
| Palmira | 16.0% | 9.4% | 64.8% | 8.4% | 1.5% | 2029 |
| Pasto | 14.6% | 10.1% | 66.2% | 8.2% | 1.0% | 3139 |
| Pereira | 17.2% | 10.8% | 59.3% | 10.7% | 2.1% | 3308 |
| Piedecuesta | 14.5% | 8.7% | 69.1% | 6.0% | 1.7% | 1127 |
| Pitalito | 19.3% | 12.0% | 56.5% | 11.0% | 1.3% | 1278 |
| Popayán | 14.3% | 9.7% | 66.7% | 7.9% | 1.4% | 2111 |
| Putumayo | 16.6% | 12.8% | 53.1% | 16.0% | 1.6% | 3175 |
| Quibdó | 20.5% | 12.1% | 49.5% | 13.1% | 4.7% | 1100 |
| Quindío | 19.3% | 12.3% | 55.4% | 11.3% | 1.7% | 2049 |
| Riohacha | 18.4% | 11.8% | 54.9% | 11.9% | 3.0% | 2024 |
| Rionegro | 15.6% | 9.7% | 64.8% | 9.5% | 0.4% | 812 |
| Risaralda | 19.8% | 11.8% | 52.8% | 13.5% | 2.1% | 2284 |
| Sabaneta | 10.0% | 6.1% | 77.3% | 5.2% | 1.5% | 330 |
| Sahagún | 19.7% | 12.4% | 48.5% | 17.2% | 2.2% | 997 |
| San Andrés | 19.1% | 13.4% | 49.8% | 15.1% | 2.6% | 418 |
| Santa Marta | 18.7% | 11.4% | 55.3% | 11.2% | 3.4% | 4045 |
| Santander | 16.0% | 10.0% | 61.1% | 11.8% | 1.0% | 6364 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 17.2% | 10.9% | 57.7% | 12.0% | 2.2% | 2577 |
| Soacha | 16.1% | 10.6% | 64.5% | 7.7% | 1.1% | 4049 |
| Sogamoso | 14.0% | 9.2% | 69.4% | 7.2% | 0.2% | 1118 |
| Soledad | 17.5% | 10.9% | 60.6% | 9.4% | 1.6% | 3865 |
| Sucre | 19.0% | 15.1% | 45.4% | 17.3% | 3.2% | 6081 |
| Tolima | 19.6% | 12.6% | 51.6% | 14.1% | 2.2% | 7516 |
| Tuluá | 17.2% | 9.6% | 62.9% | 8.5% | 1.7% | 1638 |
| Tumaco | 18.4% | 13.0% | 46.1% | 15.3% | 7.2% | 2161 |
| Tunja | 11.3% | 8.7% | 71.7% | 7.4% | 0.9% | 1288 |
| Turbo | 21.2% | 14.7% | 43.5% | 17.2% | 3.4% | 1474 |
| Uribia | 23.0% | 14.3% | 35.3% | 21.0% | 6.4% | 729 |
| Valle del Cauca | 19.2% | 12.1% | 55.3% | 11.0% | 2.4% | 6459 |
| Valledupar | 17.9% | 10.8% | 56.0% | 12.2% | 3.1% | 3519 |
| Vaupés | 20.0% | 0.0% | 20.0% | 0.0% | 60.0% | 5 |
| Vichada | 21.2% | 11.6% | 46.4% | 18.6% | 2.2% | 543 |
| Villavicencio | 14.8% | 9.3% | 67.2% | 7.6% | 1.0% | 4132 |
| Yopal | 17.5% | 11.1% | 59.8% | 10.2% | 1.3% | 1346 |
| Yumbo | 19.3% | 13.6% | 53.6% | 11.7% | 1.8% | 933 |
| Zipaquirá | 13.3% | 10.1% | 69.1% | 6.8% | 0.7% | 987 |
| Colombia | 16.9% | 11.0% | 58.6% | 11.2% | 2.3% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 21.

A la fiesta de Carlos asistieron en principio 25 personas, luego llegaron 13 personas más. ¿Cuántas personas en total asistieron a la fiesta?

A. 12
B. 13
C. 25
D. 38

## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Numérico - variacional |
| **Afirmación** | Resolver problemas aditivos rutinarios de composición y transformación e interpretar condiciones necesarias para su solución. |
| **Nivel de desempeño** | Mínimo |
| **Respuesta Correcta** | D |

- **Resultados a nivel de Entidad Territorial certificada (ETC)**

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 7.0% | 7.9% | 9.5% | 72.0% | 3.6% | 800 |
| Antioquia | 4.3% | 5.1% | 6.2% | 81.7% | 2.6% | 22998 |
| Apartadó | 4.1% | 6.9% | 7.8% | 77.6% | 3.6% | 1358 |
| Arauca | 4.0% | 4.4% | 6.3% | 83.1% | 2.2% | 2079 |
| Armenia | 5.5% | 3.4% | 4.6% | 85.2% | 1.2% | 1915 |
| Atlántico | 6.2% | 7.3% | 8.4% | 74.1% | 4.0% | 4465 |
| Barrancabermeja | 3.3% | 4.6% | 5.5% | 84.1% | 2.6% | 1796 |
| Barranquilla | 4.7% | 4.4% | 6.0% | 82.1% | 2.8% | 7800 |
| Bello | 2.9% | 3.1% | 3.7% | 88.7% | 1.6% | 2933 |
| Bogotá, D.C. | 2.7% | 2.7% | 3.4% | 88.6% | 2.5% | 47936 |
| Bolívar | 7.4% | 9.9% | 12.4% | 65.2% | 5.1% | 8304 |
| Boyacá | 3.4% | 5.0% | 6.2% | 83.9% | 1.5% | 6892 |
| Bucaramanga | 2.7% | 2.4% | 3.6% | 89.9% | 1.4% | 3830 |
| Buenaventura | 4.7% | 5.1% | 7.3% | 79.6% | 3.3% | 2848 |
| Buga | 4.0% | 2.8% | 5.5% | 83.3% | 4.4% | 822 |
| Caldas | 4.1% | 4.1% | 5.5% | 84.6% | 1.7% | 4508 |
| Cali | 3.5% | 3.5% | 4.5% | 86.2% | 2.3% | 14474 |
| Caquetá | 4.9% | 4.4% | 6.5% | 81.8% | 2.4% | 2765 |
| Cartagena | 4.9% | 6.0% | 7.5% | 77.9% | 3.7% | 8114 |
| Cartago | 3.6% | 3.9% | 5.4% | 84.2% | 2.8% | 811 |
| Casanare | 3.7% | 5.0% | 6.5% | 82.6% | 2.2% | 2226 |
| Cauca | 5.3% | 5.7% | 7.0% | 78.6% | 3.4% | 9635 |
| Cesar | 5.2% | 5.6% | 8.2% | 77.6% | 3.4% | 6652 |
| Chocó | 6.5% | 10.1% | 11.3% | 66.9% | 5.1% | 3467 |
| Chía | 2.7% | 2.6% | 3.1% | 90.4% | 1.1% | 961 |
| Ciénaga | 5.8% | 6.6% | 6.4% | 76.2% | 5.0% | 1144 |
| Cundinamarca | 3.1% | 3.3% | 4.6% | 87.4% | 1.7% | 11911 |
| Córdoba | 6.2% | 7.9% | 9.6% | 72.4% | 3.9% | 9883 |
| Cúcuta | 4.0% | 3.6% | 4.8% | 86.2% | 1.4% | 5554 |
| Dosquebradas | 2.8% | 2.9% | 4.9% | 86.1% | 3.2% | 1196 |
| Duitama | 2.9% | 2.1% | 3.9% | 90.6% | 0.5% | 1001 |
| Envigado | 1.7% | 1.3% | 3.0% | 92.5% | 1.4% | 989 |
| Facatativá | 2.7% | 3.6% | 3.3% | 87.0% | 3.4% | 1083 |
| Florencia | 4.9% | 4.7% | 5.5% | 82.8% | 2.1% | 1576 |
| Floridablanca | 3.4% | 2.8% | 3.7% | 89.1% | 1.0% | 1916 |
| Fusagasugá | 2.7% | 3.6% | 4.4% | 87.9% | 1.4% | 1029 |
| Girardot | 4.9% | 5.4% | 6.3% | 80.1% | 3.3% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 3.2% | 3.4% | 3.5% | 88.6% | 1.2% | 1046 |
| Guainía | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 2 |
| Guaviare | 4.6% | 5.6% | 7.1% | 79.4% | 3.3% | 807 |
| Huila | 4.4% | 4.7% | 6.7% | 82.5% | 1.7% | 6495 |
| Ibagué | 3.9% | 3.7% | 4.5% | 86.1% | 1.8% | 3872 |
| Ipiales | 4.2% | 3.6% | 4.2% | 86.7% | 1.4% | 1059 |
| Itagüí | 2.9% | 4.3% | 4.3% | 86.1% | 2.5% | 1338 |
| Jamundí | 3.8% | 3.8% | 6.4% | 83.1% | 2.8% | 813 |
| La Guajira | 6.4% | 8.1% | 10.6% | 71.0% | 3.8% | 3168 |
| Lorica | 6.5% | 9.8% | 9.8% | 71.0% | 2.9% | 1210 |
| Magangué | 7.6% | 9.1% | 13.2% | 66.0% | 4.1% | 1322 |
| Magdalena | 6.8% | 9.3% | 10.8% | 67.2% | 5.9% | 6778 |
| Maicao | 5.8% | 7.5% | 9.3% | 74.1% | 3.3% | 1598 |
| Malambo | 4.5% | 4.7% | 7.7% | 79.6% | 3.4% | 1034 |
| Manizales | 2.4% | 3.1% | 4.5% | 88.4% | 1.6% | 2464 |
| Medellín | 3.6% | 4.1% | 4.7% | 84.7% | 2.8% | 15397 |
| Meta | 3.8% | 4.7% | 6.7% | 81.4% | 3.3% | 4322 |
| Montería | 5.1% | 6.0% | 7.5% | 77.6% | 3.9% | 3813 |
| Mosquera | 3.3% | 2.7% | 3.9% | 89.0% | 1.2% | 853 |
| Nariño | 3.9% | 4.4% | 6.1% | 82.6% | 3.1% | 7671 |
| Neiva | 5.1% | 3.6% | 5.3% | 84.2% | 1.9% | 2916 |
| Norte de Santander | 4.2% | 3.3% | 5.4% | 85.2% | 1.9% | 6070 |
| Palmira | 4.0% | 3.8% | 3.6% | 86.4% | 2.1% | 2029 |
| Pasto | 3.2% | 3.2% | 4.1% | 88.4% | 1.1% | 3139 |
| Pereira | 3.8% | 4.0% | 4.9% | 85.0% | 2.3% | 3308 |
| Piedecuesta | 2.8% | 2.6% | 2.8% | 89.9% | 1.9% | 1127 |
| Pitalito | 3.3% | 3.6% | 5.7% | 85.8% | 1.6% | 1278 |
| Popayán | 3.8% | 2.6% | 5.3% | 86.6% | 1.7% | 2111 |
| Putumayo | 4.9% | 5.4% | 6.2% | 81.4% | 2.1% | 3175 |
| Quibdó | 4.5% | 4.8% | 8.6% | 76.7% | 5.4% | 1100 |
| Quindío | 4.0% | 5.5% | 5.9% | 82.4% | 2.2% | 2049 |
| Riohacha | 5.9% | 7.5% | 7.8% | 75.6% | 3.2% | 2024 |
| Rionegro | 2.7% | 3.0% | 4.1% | 89.2% | 1.1% | 812 |
| Risaralda | 4.3% | 5.5% | 6.5% | 81.8% | 1.9% | 2284 |
| Sabaneta | 3.0% | 0.9% | 2.7% | 92.1% | 1.2% | 330 |
| Sahagún | 5.6% | 6.5% | 9.0% | 75.9% | 2.9% | 997 |
| San Andrés | 5.5% | 6.9% | 8.6% | 75.6% | 3.3% | 418 |
| Santa Marta | 4.9% | 5.9% | 7.6% | 78.0% | 3.5% | 4045 |
| Santander | 3.9% | 4.1% | 5.0% | 85.8% | 1.2% | 6364 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 5.4% | 5.4% | 7.5% | 79.3% | 2.5% | 2577 |
| Soacha | 3.3% | 3.0% | 4.2% | 88.3% | 1.2% | 4049 |
| Sogamoso | 3.1% | 3.8% | 2.9% | 89.1% | 1.2% | 1118 |
| Soledad | 4.9% | 4.5% | 5.7% | 82.9% | 2.0% | 3865 |
| Sucre | 6.8% | 8.2% | 10.6% | 70.9% | 3.5% | 6081 |
| Tolima | 4.4% | 5.6% | 7.4% | 79.7% | 2.8% | 7516 |
| Tuluá | 2.9% | 3.5% | 4.3% | 86.5% | 2.7% | 1638 |
| Tumaco | 6.7% | 10.6% | 9.8% | 65.1% | 7.8% | 2161 |
| Tunja | 3.4% | 4.1% | 2.6% | 88.9% | 0.9% | 1288 |
| Turbo | 7.3% | 8.9% | 12.1% | 67.8% | 3.9% | 1474 |
| Uribia | 7.7% | 11.5% | 15.0% | 58.0% | 7.8% | 729 |
| Valle del Cauca | 4.3% | 5.0% | 5.5% | 82.5% | 2.7% | 6459 |
| Valledupar | 4.4% | 5.3% | 6.7% | 79.4% | 4.2% | 3519 |
| Vaupés | 0.0% | 20.0% | 0.0% | 20.0% | 60.0% | 5 |
| Vichada | 6.1% | 6.8% | 7.7% | 75.9% | 3.5% | 543 |
| Villavicencio | 2.7% | 2.9% | 3.8% | 89.0% | 1.6% | 4132 |
| Yopal | 3.3% | 3.3% | 4.4% | 87.5% | 1.5% | 1346 |
| Yumbo | 4.1% | 4.8% | 8.1% | 80.8% | 2.1% | 933 |
| Zipaquirá | 2.8% | 2.7% | 3.1% | 90.0% | 1.3% | 987 |
| Colombia | 4.2% | 4.8% | 6.1% | 82.2% | 2.7% | 369417 |

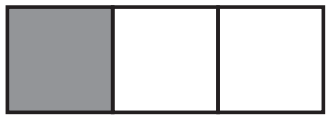
*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 22.

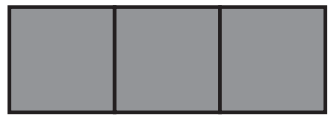
¿Cuál de las siguientes figuras representa $\frac{1}{3}$?

Ten en cuenta que el numerador representa la parte sombreada

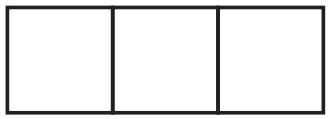
A.



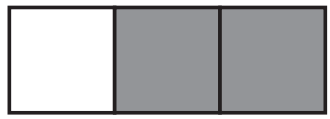
B.



C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Numérico - variacional |
| **Afirmación** | Usar fracciones comunes para describir situaciones continuas y discretas. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 44.9% | 24.5% | 16.4% | 10.8% | 3.5% | 800 |
| Antioquia | 52.8% | 21.5% | 15.4% | 7.5% | 2.7% | 22998 |
| Apartadó | 47.5% | 21.9% | 17.1% | 9.0% | 4.6% | 1358 |
| Arauca | 58.9% | 19.2% | 12.8% | 6.4% | 2.6% | 2079 |
| Armenia | 59.0% | 18.1% | 15.3% | 6.6% | 1.0% | 1915 |
| Atlántico | 52.7% | 19.8% | 14.2% | 9.0% | 4.3% | 4465 |
| Barrancabermeja | 61.0% | 17.4% | 12.2% | 7.4% | 2.0% | 1796 |
| Barranquilla | 57.8% | 19.2% | 13.3% | 6.8% | 2.8% | 7800 |
| Bello | 58.9% | 19.2% | 13.2% | 6.9% | 1.8% | 2933 |
| Bogotá, D.C. | 62.4% | 18.0% | 12.1% | 4.9% | 2.6% | 47936 |
| Bolívar | 41.6% | 23.6% | 18.6% | 10.9% | 5.3% | 8304 |
| Boyacá | 54.4% | 21.3% | 15.3% | 7.4% | 1.5% | 6892 |
| Bucaramanga | 69.5% | 14.9% | 9.5% | 4.6% | 1.5% | 3830 |
| Buenaventura | 58.3% | 20.3% | 10.7% | 7.7% | 3.1% | 2848 |
| Buga | 54.9% | 20.9% | 14.0% | 6.0% | 4.3% | 822 |
| Caldas | 56.2% | 20.4% | 14.1% | 7.5% | 1.9% | 4508 |
| Cali | 59.5% | 18.9% | 12.8% | 6.0% | 2.9% | 14474 |
| Caquetá | 57.7% | 19.2% | 13.1% | 7.8% | 2.1% | 2765 |
| Cartagena | 56.2% | 19.3% | 13.2% | 7.9% | 3.3% | 8114 |
| Cartago | 54.0% | 21.5% | 14.5% | 6.4% | 3.6% | 811 |
| Casanare | 53.7% | 22.1% | 14.7% | 6.7% | 2.7% | 2226 |
| Cauca | 56.2% | 19.1% | 13.3% | 8.1% | 3.3% | 9635 |
| Cesar | 52.1% | 20.7% | 15.5% | 8.5% | 3.3% | 6652 |
| Chocó | 42.0% | 22.1% | 18.4% | 12.2% | 5.3% | 3467 |
| Chía | 65.7% | 17.2% | 10.7% | 4.9% | 1.6% | 961 |
| Ciénaga | 49.1% | 20.9% | 14.0% | 9.1% | 6.9% | 1144 |
| Cundinamarca | 60.7% | 18.7% | 12.9% | 6.0% | 1.7% | 11911 |
| Córdoba | 45.7% | 23.3% | 17.5% | 10.0% | 3.6% | 9883 |
| Cúcuta | 63.9% | 17.1% | 12.3% | 5.3% | 1.4% | 5554 |
| Dosquebradas | 63.3% | 17.4% | 11.7% | 5.2% | 2.4% | 1196 |
| Duitama | 74.1% | 15.1% | 5.9% | 4.2% | 0.7% | 1001 |
| Envigado | 68.3% | 15.1% | 11.0% | 4.4% | 1.2% | 989 |
| Facatativá | 67.7% | 13.9% | 8.7% | 6.7% | 3.0% | 1083 |
| Florencia | 50.1% | 22.7% | 17.5% | 7.5% | 2.3% | 1576 |
| Floridablanca | 71.7% | 14.5% | 8.5% | 4.3% | 1.0% | 1916 |
| Fusagasugá | 61.4% | 17.5% | 12.9% | 6.8% | 1.4% | 1029 |
| Girardot | 53.2% | 20.5% | 16.4% | 6.5% | 3.3% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 64.5% | 17.4% | 12.4% | 5.1% | 0.6% | 1046 |
| Guainía | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 2 |
| Guaviare | 51.8% | 19.5% | 17.6% | 8.3% | 2.9% | 807 |
| Huila | 54.1% | 21.7% | 15.6% | 7.1% | 1.6% | 6495 |
| Ibagué | 62.1% | 18.8% | 11.2% | 5.9% | 2.0% | 3872 |
| Ipiales | 64.9% | 16.1% | 11.0% | 6.8% | 1.2% | 1059 |
| Itagüí | 60.3% | 18.0% | 13.3% | 6.6% | 1.8% | 1338 |
| Jamundí | 57.4% | 18.3% | 14.8% | 7.1% | 2.3% | 813 |
| La Guajira | 50.3% | 21.1% | 15.7% | 9.4% | 3.6% | 3168 |
| Lorica | 48.3% | 22.4% | 16.1% | 10.1% | 3.1% | 1210 |
| Magangué | 38.9% | 25.9% | 19.7% | 11.3% | 4.1% | 1322 |
| Magdalena | 43.2% | 22.4% | 18.1% | 10.2% | 6.1% | 6778 |
| Maicao | 43.0% | 24.1% | 19.4% | 10.2% | 3.3% | 1598 |
| Malambo | 57.9% | 19.1% | 10.4% | 8.6% | 4.0% | 1034 |
| Manizales | 60.1% | 18.3% | 13.6% | 6.4% | 1.5% | 2464 |
| Medellín | 56.0% | 20.3% | 14.8% | 6.5% | 2.4% | 15397 |
| Meta | 57.5% | 18.5% | 13.4% | 7.4% | 3.1% | 4322 |
| Montería | 52.9% | 19.0% | 16.1% | 8.5% | 3.6% | 3813 |
| Mosquera | 64.7% | 19.1% | 11.1% | 4.0% | 1.1% | 853 |
| Nariño | 59.1% | 18.1% | 12.4% | 7.7% | 2.7% | 7671 |
| Neiva | 58.8% | 19.0% | 13.2% | 6.9% | 2.1% | 2916 |
| Norte de Santander | 61.3% | 17.9% | 12.5% | 6.9% | 1.5% | 6070 |
| Palmira | 58.4% | 19.7% | 13.7% | 5.9% | 2.3% | 2029 |
| Pasto | 64.0% | 18.2% | 11.6% | 5.0% | 1.2% | 3139 |
| Pereira | 57.8% | 19.0% | 14.1% | 6.7% | 2.5% | 3308 |
| Piedecuesta | 69.2% | 15.5% | 9.5% | 3.4% | 2.4% | 1127 |
| Pitalito | 60.6% | 18.4% | 12.4% | 6.5% | 2.0% | 1278 |
| Popayán | 61.6% | 18.0% | 11.7% | 6.7% | 1.9% | 2111 |
| Putumayo | 52.8% | 23.3% | 15.5% | 6.7% | 1.8% | 3175 |
| Quibdó | 52.0% | 17.5% | 15.7% | 10.1% | 4.6% | 1100 |
| Quindío | 53.7% | 20.5% | 15.5% | 7.7% | 2.5% | 2049 |
| Riohacha | 54.1% | 19.7% | 13.3% | 9.5% | 3.4% | 2024 |
| Rionegro | 63.8% | 18.7% | 9.2% | 7.3% | 1.0% | 812 |
| Risaralda | 53.5% | 19.4% | 17.0% | 7.5% | 2.5% | 2284 |
| Sabaneta | 72.4% | 12.1% | 9.4% | 4.8% | 1.2% | 330 |
| Sahagún | 45.9% | 22.7% | 17.7% | 10.9% | 2.8% | 997 |
| San Andrés | 47.1% | 24.4% | 18.7% | 7.4% | 2.4% | 418 |
| Santa Marta | 53.6% | 19.5% | 14.4% | 8.6% | 3.8% | 4045 |
| Santander | 63.0% | 17.5% | 12.1% | 6.1% | 1.3% | 6364 |

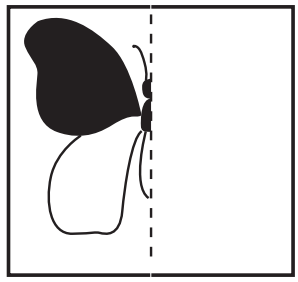
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 55.1% | 21.1% | 13.9% | 7.2% | 2.7% | 2577 |
| Soacha | 64.2% | 16.1% | 12.2% | 6.3% | 1.1% | 4049 |
| Sogamoso | 69.2% | 14.7% | 10.6% | 5.0% | 0.5% | 1118 |
| Soledad | 61.8% | 18.1% | 12.1% | 6.3% | 1.8% | 3865 |
| Sucre | 43.6% | 23.4% | 18.9% | 10.5% | 3.7% | 6081 |
| Tolima | 52.0% | 21.0% | 15.2% | 9.1% | 2.7% | 7516 |
| Tuluá | 60.4% | 18.0% | 13.0% | 6.4% | 2.1% | 1638 |
| Tumaco | 43.5% | 21.7% | 16.6% | 10.6% | 7.6% | 2161 |
| Tunja | 68.4% | 17.5% | 9.0% | 4.1% | 1.0% | 1288 |
| Turbo | 40.7% | 24.4% | 18.6% | 11.9% | 4.5% | 1474 |
| Uribia | 39.5% | 21.9% | 19.6% | 11.7% | 7.3% | 729 |
| Valle del Cauca | 50.9% | 21.3% | 16.5% | 8.6% | 2.8% | 6459 |
| Valledupar | 55.7% | 19.2% | 14.4% | 6.7% | 4.1% | 3519 |
| Vaupés | 20.0% | 20.0% | 0.0% | 0.0% | 60.0% | 5 |
| Vichada | 50.1% | 21.0% | 16.8% | 8.7% | 3.5% | 543 |
| Villavicencio | 67.1% | 16.4% | 10.7% | 4.4% | 1.5% | 4132 |
| Yopal | 60.2% | 18.1% | 12.1% | 7.4% | 2.2% | 1346 |
| Yumbo | 50.8% | 21.7% | 17.8% | 7.3% | 2.5% | 933 |
| Zipaquirá | 76.5% | 10.9% | 8.1% | 3.4% | 1.0% | 987 |
| Colombia | 56.5% | 19.6% | 14.0% | 7.2% | 2.7% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

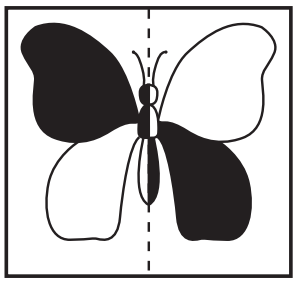
## • Pregunta 23.

Acabaste de dibujar con témpera esta figura y la doblaste por la línea punteada.

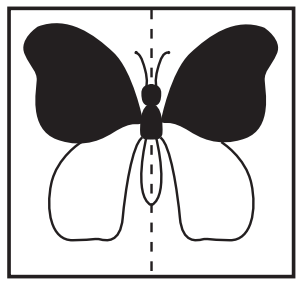


Al desdoblar la hoja, ¿qué figura observas?

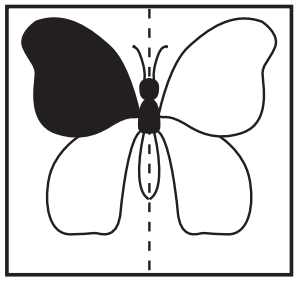
A.



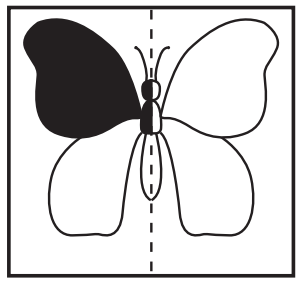
B.



C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Establecer conjeturas acerca de las propiedades de las figuras planas cuando sobre ellas se ha hecho una transformación (traslación, rotación, reflexión (simetría), ampliación, reducción). |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | B |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 13.4% | 53.9% | 13.6% | 15.9% | 3.3% | 800 |
| Antioquia | 17.9% | 51.9% | 11.5% | 15.9% | 2.8% | 22998 |
| Apartadó | 17.8% | 47.4% | 14.4% | 16.3% | 4.1% | 1358 |
| Arauca | 16.0% | 53.4% | 11.5% | 16.5% | 2.5% | 2079 |
| Armenia | 15.6% | 54.8% | 11.7% | 16.9% | 0.9% | 1915 |
| Atlántico | 16.1% | 50.9% | 11.4% | 17.2% | 4.4% | 4465 |
| Barrancabermeja | 14.6% | 55.2% | 11.1% | 16.6% | 2.6% | 1796 |
| Barranquilla | 13.8% | 55.2% | 10.2% | 18.0% | 2.8% | 7800 |
| Bello | 14.7% | 56.2% | 10.1% | 17.5% | 1.5% | 2933 |
| Bogotá, D.C. | 13.2% | 61.5% | 8.2% | 14.6% | 2.5% | 47936 |
| Bolívar | 19.6% | 44.1% | 13.7% | 16.8% | 5.7% | 8304 |
| Boyacá | 18.0% | 52.9% | 11.4% | 16.2% | 1.6% | 6892 |
| Bucaramanga | 13.2% | 60.5% | 9.1% | 15.7% | 1.5% | 3830 |
| Buenaventura | 14.0% | 55.1% | 10.8% | 17.4% | 2.8% | 2848 |
| Buga | 12.7% | 61.2% | 7.8% | 14.0% | 4.4% | 822 |
| Caldas | 15.6% | 57.1% | 9.7% | 15.3% | 2.3% | 4508 |
| Cali | 13.0% | 60.9% | 9.2% | 14.3% | 2.6% | 14474 |
| Caquetá | 18.3% | 53.5% | 11.8% | 14.2% | 2.2% | 2765 |
| Cartagena | 13.9% | 56.8% | 10.9% | 14.9% | 3.5% | 8114 |
| Cartago | 12.8% | 54.6% | 12.3% | 16.9% | 3.3% | 811 |
| Casanare | 17.3% | 50.1% | 12.4% | 17.7% | 2.5% | 2226 |
| Cauca | 14.7% | 57.0% | 9.9% | 14.7% | 3.6% | 9635 |
| Cesar | 15.5% | 53.6% | 10.1% | 17.6% | 3.2% | 6652 |
| Chocó | 18.2% | 44.8% | 13.9% | 17.2% | 5.9% | 3467 |
| Chía | 10.3% | 64.5% | 7.5% | 16.0% | 1.7% | 961 |
| Ciénaga | 13.5% | 55.9% | 8.2% | 17.1% | 5.2% | 1144 |
| Cundinamarca | 14.1% | 59.9% | 9.1% | 15.2% | 1.6% | 11911 |
| Córdoba | 17.3% | 48.7% | 13.2% | 17.0% | 3.7% | 9883 |
| Cúcuta | 16.9% | 55.4% | 9.6% | 16.8% | 1.4% | 5554 |
| Dosquebradas | 14.6% | 56.0% | 10.3% | 15.9% | 3.2% | 1196 |
| Duitama | 11.3% | 66.0% | 8.1% | 13.9% | 0.7% | 1001 |
| Envigado | 14.8% | 63.0% | 7.2% | 13.3% | 1.7% | 989 |
| Facatativá | 14.3% | 59.3% | 9.0% | 15.0% | 2.5% | 1083 |
| Florencia | 16.9% | 53.4% | 11.3% | 16.1% | 2.3% | 1576 |
| Floridablanca | 12.6% | 59.0% | 10.2% | 17.0% | 1.2% | 1916 |
| Fusagasugá | 14.8% | 60.1% | 9.2% | 15.0% | 1.0% | 1029 |
| Girardot | 14.1% | 61.3% | 9.0% | 12.2% | 3.3% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 16.6% | 53.3% | 12.6% | 17.1% | 0.3% | 1046 |
| Guainía | 50.0% | 50.0% | 0.0% | 0.0% | 0.0% | 2 |
| Guaviare | 16.7% | 53.7% | 10.5% | 16.2% | 2.9% | 807 |
| Huila | 16.0% | 55.9% | 10.2% | 16.1% | 1.7% | 6495 |
| Ibagué | 14.5% | 58.9% | 9.1% | 15.5% | 2.0% | 3872 |
| Ipiales | 13.7% | 63.9% | 8.1% | 13.0% | 1.2% | 1059 |
| Itagüí | 15.2% | 54.9% | 10.6% | 17.0% | 2.2% | 1338 |
| Jamundí | 14.8% | 56.1% | 10.3% | 16.1% | 2.7% | 813 |
| La Guajira | 15.9% | 52.1% | 11.0% | 16.9% | 4.0% | 3168 |
| Lorica | 16.6% | 46.7% | 14.0% | 19.1% | 3.6% | 1210 |
| Magangué | 19.4% | 42.4% | 13.8% | 19.5% | 4.8% | 1322 |
| Magdalena | 17.4% | 47.8% | 12.2% | 16.4% | 6.2% | 6778 |
| Maicao | 17.3% | 50.9% | 13.6% | 14.5% | 3.7% | 1598 |
| Malambo | 13.9% | 61.3% | 8.6% | 12.2% | 4.0% | 1034 |
| Manizales | 14.9% | 57.4% | 9.6% | 16.4% | 1.7% | 2464 |
| Medellín | 17.5% | 52.6% | 10.4% | 17.1% | 2.5% | 15397 |
| Meta | 16.1% | 51.7% | 11.0% | 18.2% | 3.1% | 4322 |
| Montería | 16.0% | 52.6% | 11.6% | 16.0% | 3.8% | 3813 |
| Mosquera | 12.8% | 62.0% | 7.9% | 16.4% | 0.9% | 853 |
| Nariño | 14.9% | 55.6% | 10.3% | 16.4% | 2.8% | 7671 |
| Neiva | 15.5% | 56.3% | 9.5% | 16.7% | 2.1% | 2916 |
| Norte de Santander | 16.3% | 55.0% | 10.1% | 17.0% | 1.6% | 6070 |
| Palmira | 12.8% | 61.8% | 8.1% | 15.3% | 1.9% | 2029 |
| Pasto | 12.6% | 62.6% | 8.3% | 15.3% | 1.2% | 3139 |
| Pereira | 15.2% | 56.4% | 10.2% | 16.3% | 1.9% | 3308 |
| Piedecuesta | 16.0% | 56.2% | 8.9% | 16.9% | 2.1% | 1127 |
| Pitalito | 15.7% | 53.9% | 11.0% | 17.5% | 1.9% | 1278 |
| Popayán | 14.6% | 59.1% | 9.0% | 15.5% | 1.8% | 2111 |
| Putumayo | 18.0% | 53.2% | 10.1% | 16.1% | 2.5% | 3175 |
| Quibdó | 13.0% | 49.8% | 12.5% | 18.6% | 6.1% | 1100 |
| Quindío | 16.1% | 55.7% | 10.3% | 15.3% | 2.7% | 2049 |
| Riohacha | 14.6% | 54.6% | 10.0% | 16.5% | 4.2% | 2024 |
| Rionegro | 12.4% | 60.8% | 9.7% | 16.1% | 0.9% | 812 |
| Risaralda | 18.0% | 54.2% | 10.7% | 14.6% | 2.6% | 2284 |
| Sabaneta | 10.6% | 63.3% | 8.5% | 16.4% | 1.2% | 330 |
| Sahagún | 15.8% | 50.5% | 13.7% | 17.5% | 2.5% | 997 |
| San Andrés | 14.6% | 52.2% | 13.9% | 16.7% | 2.6% | 418 |
| Santa Marta | 14.5% | 55.9% | 10.1% | 15.6% | 3.9% | 4045 |
| Santander | 15.7% | 57.5% | 9.6% | 16.0% | 1.3% | 6364 |

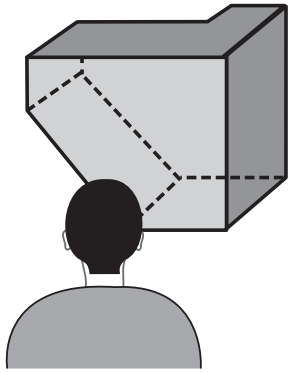
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 15.9% | 53.6% | 11.3% | 16.7% | 2.6% | 2577 |
| Soacha | 14.1% | 60.9% | 8.9% | 14.9% | 1.3% | 4049 |
| Sogamoso | 14.6% | 58.5% | 9.0% | 17.1% | 0.8% | 1118 |
| Soledad | 13.9% | 57.5% | 9.5% | 17.2% | 1.9% | 3865 |
| Sucre | 18.8% | 46.6% | 14.0% | 17.0% | 3.6% | 6081 |
| Tolima | 17.9% | 52.2% | 10.8% | 16.2% | 2.8% | 7516 |
| Tuluá | 12.7% | 60.9% | 9.5% | 15.0% | 2.0% | 1638 |
| Tumaco | 18.3% | 45.9% | 12.3% | 15.9% | 7.6% | 2161 |
| Tunja | 13.3% | 62.9% | 7.5% | 14.9% | 1.4% | 1288 |
| Turbo | 20.0% | 40.7% | 15.1% | 19.1% | 5.0% | 1474 |
| Uribia | 20.6% | 38.3% | 15.5% | 16.7% | 8.9% | 729 |
| Valle del Cauca | 15.9% | 56.0% | 9.4% | 15.9% | 2.8% | 6459 |
| Valledupar | 15.0% | 56.5% | 9.4% | 15.2% | 3.9% | 3519 |
| Vaupés | 0.0% | 0.0% | 20.0% | 20.0% | 60.0% | 5 |
| Vichada | 21.2% | 50.1% | 12.5% | 14.2% | 2.0% | 543 |
| Villavicencio | 13.9% | 60.0% | 9.0% | 15.8% | 1.3% | 4132 |
| Yopal | 14.0% | 57.8% | 9.6% | 17.2% | 1.4% | 1346 |
| Yumbo | 18.2% | 54.3% | 9.5% | 15.5% | 2.4% | 933 |
| Zipaquirá | 10.2% | 69.0% | 6.1% | 13.6% | 1.1% | 987 |
| Colombia | 15.5% | 55.5% | 10.3% | 16.0% | 2.8% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 24.

Giovanni está viendo un sólido de frente.

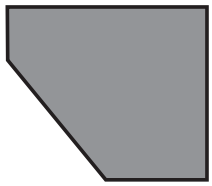


¿Qué observa Giovanni del sólido?

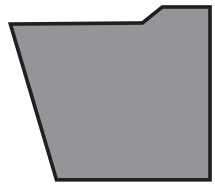
A.

B.

C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Relacionar objetos tridimensionales con sus respectivas vistas. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 7.4% | 12.8% | 47.1% | 29.6% | 3.1% | 800 |
| Antioquia | 7.5% | 7.7% | 51.8% | 29.9% | 3.1% | 22998 |
| Apartadó | 7.5% | 7.7% | 52.1% | 28.9% | 3.8% | 1358 |
| Arauca | 6.3% | 8.0% | 49.4% | 33.7% | 2.7% | 2079 |
| Armenia | 7.7% | 5.3% | 53.8% | 32.3% | 0.8% | 1915 |
| Atlántico | 8.2% | 8.6% | 51.7% | 26.9% | 4.6% | 4465 |
| Barrancabermeja | 5.2% | 4.6% | 57.4% | 30.1% | 2.7% | 1796 |
| Barranquilla | 6.1% | 6.2% | 54.2% | 30.3% | 3.2% | 7800 |
| Bello | 6.6% | 4.7% | 54.6% | 32.6% | 1.5% | 2933 |
| Bogotá, D.C. | 5.9% | 3.8% | 56.9% | 30.7% | 2.7% | 47936 |
| Bolívar | 9.6% | 13.0% | 41.8% | 29.3% | 6.2% | 8304 |
| Boyacá | 7.5% | 7.5% | 50.1% | 33.1% | 1.8% | 6892 |
| Bucaramanga | 6.5% | 4.2% | 60.8% | 27.0% | 1.5% | 3830 |
| Buenaventura | 6.2% | 8.1% | 54.3% | 28.2% | 3.2% | 2848 |
| Buga | 5.0% | 4.0% | 56.8% | 30.4% | 3.8% | 822 |
| Caldas | 6.8% | 6.6% | 53.6% | 30.9% | 2.1% | 4508 |
| Cali | 5.7% | 4.0% | 58.6% | 29.0% | 2.7% | 14474 |
| Caquetá | 8.2% | 8.1% | 54.7% | 26.4% | 2.5% | 2765 |
| Cartagena | 6.2% | 7.6% | 55.8% | 26.8% | 3.6% | 8114 |
| Cartago | 4.4% | 5.1% | 54.9% | 32.3% | 3.3% | 811 |
| Casanare | 6.9% | 8.7% | 51.0% | 30.8% | 2.6% | 2226 |
| Cauca | 6.8% | 9.3% | 55.5% | 24.5% | 3.9% | 9635 |
| Cesar | 7.4% | 8.7% | 53.7% | 26.5% | 3.7% | 6652 |
| Chocó | 10.3% | 14.6% | 43.2% | 25.8% | 6.1% | 3467 |
| Chía | 5.8% | 3.5% | 53.9% | 35.2% | 1.6% | 961 |
| Ciénaga | 7.3% | 7.9% | 53.0% | 26.6% | 5.2% | 1144 |
| Cundinamarca | 6.6% | 5.3% | 54.6% | 31.8% | 1.6% | 11911 |
| Córdoba | 9.1% | 11.2% | 46.9% | 28.7% | 4.1% | 9883 |
| Cúcuta | 6.2% | 5.2% | 55.0% | 32.0% | 1.6% | 5554 |
| Dosquebradas | 6.4% | 5.7% | 53.8% | 30.9% | 3.1% | 1196 |
| Duitama | 6.6% | 5.6% | 63.0% | 24.0% | 0.8% | 1001 |
| Envigado | 5.6% | 3.7% | 58.9% | 30.5% | 1.2% | 989 |
| Facatativá | 6.1% | 3.5% | 55.1% | 32.5% | 2.8% | 1083 |
| Florencia | 7.2% | 7.0% | 53.7% | 30.0% | 2.0% | 1576 |
| Floridablanca | 6.3% | 3.4% | 61.2% | 27.7% | 1.4% | 1916 |
| Fusagasugá | 5.6% | 6.0% | 50.9% | 35.9% | 1.6% | 1029 |
| Girardot | 4.9% | 4.1% | 54.8% | 32.7% | 3.5% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 7.6% | 4.9% | 56.9% | 29.7% | 1.0% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2 |
| Guaviare | 6.7% | 9.2% | 50.6% | 29.9% | 3.7% | 807 |
| Huila | 6.1% | 8.5% | 52.2% | 31.3% | 1.9% | 6495 |
| Ibagué | 6.8% | 4.7% | 57.2% | 29.4% | 1.9% | 3872 |
| Ipiales | 6.2% | 6.0% | 55.8% | 31.1% | 0.8% | 1059 |
| Itagüí | 7.2% | 6.4% | 50.8% | 33.2% | 2.3% | 1338 |
| Jamundí | 6.6% | 6.8% | 53.9% | 30.4% | 2.3% | 813 |
| La Guajira | 9.5% | 10.5% | 50.3% | 25.5% | 4.1% | 3168 |
| Lorica | 9.3% | 11.2% | 47.6% | 28.3% | 3.6% | 1210 |
| Magangué | 10.5% | 12.6% | 43.1% | 29.1% | 4.6% | 1322 |
| Magdalena | 9.0% | 11.0% | 46.2% | 27.1% | 6.7% | 6778 |
| Maicao | 8.2% | 12.1% | 45.7% | 30.2% | 3.9% | 1598 |
| Malambo | 7.1% | 5.3% | 59.5% | 24.4% | 3.8% | 1034 |
| Manizales | 7.4% | 4.1% | 55.2% | 31.5% | 1.8% | 2464 |
| Medellín | 7.5% | 5.2% | 51.7% | 33.0% | 2.7% | 15397 |
| Meta | 7.3% | 7.3% | 49.7% | 32.7% | 3.1% | 4322 |
| Montería | 7.7% | 8.2% | 48.3% | 31.4% | 4.4% | 3813 |
| Mosquera | 5.6% | 3.4% | 55.2% | 35.1% | 0.7% | 853 |
| Nariño | 5.9% | 7.5% | 57.8% | 25.5% | 3.3% | 7671 |
| Neiva | 6.7% | 4.9% | 54.2% | 32.0% | 2.1% | 2916 |
| Norte de Santander | 6.8% | 6.1% | 57.3% | 28.2% | 1.6% | 6070 |
| Palmira | 5.7% | 4.3% | 57.3% | 30.3% | 2.5% | 2029 |
| Pasto | 6.4% | 4.8% | 57.9% | 29.4% | 1.5% | 3139 |
| Pereira | 6.6% | 5.4% | 52.8% | 32.6% | 2.6% | 3308 |
| Piedecuesta | 5.2% | 3.5% | 61.9% | 27.6% | 1.7% | 1127 |
| Pitalito | 4.4% | 7.2% | 56.7% | 29.7% | 2.0% | 1278 |
| Popayán | 5.6% | 4.0% | 58.5% | 29.9% | 1.9% | 2111 |
| Putumayo | 7.9% | 7.9% | 50.5% | 31.2% | 2.5% | 3175 |
| Quibdó | 8.2% | 7.5% | 47.8% | 30.6% | 5.8% | 1100 |
| Quindío | 5.5% | 6.9% | 53.6% | 31.3% | 2.6% | 2049 |
| Riohacha | 7.3% | 9.0% | 53.4% | 25.5% | 4.7% | 2024 |
| Rionegro | 8.0% | 5.4% | 54.6% | 30.9% | 1.1% | 812 |
| Risaralda | 7.1% | 7.6% | 51.4% | 31.0% | 2.9% | 2284 |
| Sabaneta | 8.8% | 3.6% | 59.4% | 26.7% | 1.5% | 330 |
| Sahagún | 8.1% | 8.7% | 48.4% | 30.2% | 4.5% | 997 |
| San Andrés | 7.2% | 7.9% | 48.6% | 33.7% | 2.6% | 418 |
| Santa Marta | 6.3% | 7.2% | 52.1% | 30.1% | 4.3% | 4045 |
| Santander | 5.6% | 5.7% | 59.1% | 28.2% | 1.4% | 6364 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 6.0% | 7.6% | 52.5% | 31.4% | 2.4% | 2577 |
| Soacha | 5.8% | 4.6% | 55.9% | 32.4% | 1.4% | 4049 |
| Sogamoso | 6.4% | 4.8% | 59.1% | 28.6% | 1.0% | 1118 |
| Soledad | 5.6% | 5.7% | 57.2% | 29.5% | 2.0% | 3865 |
| Sucre | 9.0% | 12.1% | 45.2% | 29.5% | 4.2% | 6081 |
| Tolima | 6.8% | 7.4% | 52.8% | 30.2% | 2.8% | 7516 |
| Tuluá | 6.2% | 4.1% | 56.6% | 31.0% | 2.1% | 1638 |
| Tumaco | 9.3% | 12.9% | 44.1% | 24.7% | 9.0% | 2161 |
| Tunja | 7.2% | 4.0% | 58.4% | 28.9% | 1.5% | 1288 |
| Turbo | 11.5% | 12.3% | 42.5% | 28.5% | 5.1% | 1474 |
| Uribia | 12.1% | 12.6% | 41.6% | 24.0% | 9.7% | 729 |
| Valle del Cauca | 5.9% | 5.8% | 53.7% | 31.5% | 3.1% | 6459 |
| Valledupar | 7.2% | 6.4% | 54.6% | 27.4% | 4.4% | 3519 |
| Vaupés | 0.0% | 20.0% | 20.0% | 0.0% | 60.0% | 5 |
| Vichada | 7.7% | 8.3% | 49.4% | 31.3% | 3.3% | 543 |
| Villavicencio | 6.1% | 5.2% | 56.4% | 30.8% | 1.5% | 4132 |
| Yopal | 5.5% | 5.9% | 54.8% | 31.4% | 2.5% | 1346 |
| Yumbo | 8.3% | 5.8% | 50.6% | 33.0% | 2.4% | 933 |
| Zipaquirá | 4.7% | 2.8% | 57.3% | 34.0% | 1.1% | 987 |
| Colombia | 6.9% | 6.8% | 53.5% | 29.8% | 3.0% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 25.

Don Pablo tiene el metro de la figura.

Este metro es el más adecuado para medir

A. la distancia entre una ciudad y otra.
B. el ancho de la pared de una habitación.
C. el tamaño de una bacteria.
D. la altura de un edificio.

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Establecer correspondencia entre objetos o eventos y patrones o instrumentos de medida. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | B |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 8.8% | 57.9% | 16.1% | 14.3% | 3.0% | 800 |
| Antioquia | 8.0% | 61.4% | 17.2% | 11.1% | 2.3% | 22998 |
| Apartadó | 8.8% | 57.3% | 20.4% | 10.8% | 2.8% | 1358 |
| Arauca | 7.6% | 64.6% | 17.0% | 9.0% | 1.8% | 2079 |
| Armenia | 6.5% | 67.6% | 18.4% | 6.6% | 0.8% | 1915 |
| Atlántico | 9.0% | 59.4% | 14.9% | 12.9% | 3.8% | 4465 |
| Barrancabermeja | 6.5% | 64.4% | 18.7% | 8.0% | 2.5% | 1796 |
| Barranquilla | 7.1% | 64.2% | 17.3% | 8.9% | 2.6% | 7800 |
| Bello | 6.0% | 69.3% | 16.4% | 7.3% | 1.0% | 2933 |
| Bogotá, D.C. | 4.5% | 69.8% | 17.3% | 6.0% | 2.4% | 47936 |
| Bolívar | 12.6% | 48.2% | 18.2% | 16.4% | 4.7% | 8304 |
| Boyacá | 6.7% | 64.2% | 16.4% | 11.6% | 1.2% | 6892 |
| Bucaramanga | 4.5% | 68.5% | 18.1% | 7.8% | 1.0% | 3830 |
| Buenaventura | 7.9% | 61.4% | 17.5% | 10.7% | 2.4% | 2848 |
| Buga | 6.1% | 65.2% | 18.9% | 6.3% | 3.5% | 822 |
| Caldas | 5.9% | 66.8% | 16.6% | 9.0% | 1.7% | 4508 |
| Cali | 5.2% | 67.3% | 19.0% | 6.3% | 2.2% | 14474 |
| Caquetá | 8.8% | 60.2% | 18.8% | 10.6% | 1.7% | 2765 |
| Cartagena | 7.3% | 62.4% | 16.9% | 10.0% | 3.3% | 8114 |
| Cartago | 6.0% | 64.7% | 20.2% | 6.3% | 2.7% | 811 |
| Casanare | 8.0% | 60.8% | 17.9% | 10.9% | 2.3% | 2226 |
| Cauca | 7.4% | 64.0% | 13.3% | 12.5% | 2.9% | 9635 |
| Cesar | 8.1% | 60.7% | 16.3% | 12.0% | 2.8% | 6652 |
| Chocó | 13.4% | 46.1% | 16.1% | 19.6% | 4.7% | 3467 |
| Chía | 3.4% | 72.4% | 15.9% | 7.2% | 1.0% | 961 |
| Ciénaga | 7.3% | 62.8% | 13.3% | 11.9% | 4.6% | 1144 |
| Cundinamarca | 5.3% | 69.3% | 16.6% | 7.3% | 1.5% | 11911 |
| Córdoba | 10.9% | 53.2% | 17.1% | 15.5% | 3.3% | 9883 |
| Cúcuta | 6.0% | 66.9% | 18.0% | 8.1% | 1.1% | 5554 |
| Dosquebradas | 6.1% | 65.4% | 19.9% | 6.5% | 2.1% | 1196 |
| Duitama | 3.2% | 76.3% | 14.3% | 5.7% | 0.5% | 1001 |
| Envigado | 3.1% | 76.7% | 14.4% | 4.6% | 1.2% | 989 |
| Facatativá | 4.6% | 70.1% | 16.1% | 6.8% | 2.4% | 1083 |
| Florencia | 6.4% | 60.3% | 22.8% | 9.1% | 1.3% | 1576 |
| Floridablanca | 4.2% | 69.6% | 18.8% | 6.2% | 1.1% | 1916 |
| Fusagasugá | 6.2% | 67.4% | 17.3% | 7.7% | 1.4% | 1029 |
| Girardot | 8.0% | 62.9% | 16.6% | 9.9% | 2.6% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 5.6% | 67.9% | 18.9% | 6.8% | 0.8% | 1046 |
| Guainía | 0.0% | 50.0% | 50.0% | 0.0% | 0.0% | 2 |
| Guaviare | 9.3% | 56.8% | 19.6% | 11.4% | 3.0% | 807 |
| Huila | 7.2% | 64.4% | 16.0% | 11.1% | 1.3% | 6495 |
| Ibagué | 5.1% | 68.5% | 16.8% | 7.9% | 1.7% | 3872 |
| Ipiales | 5.5% | 71.5% | 14.6% | 7.6% | 0.8% | 1059 |
| Itagüí | 6.6% | 67.6% | 16.9% | 7.0% | 1.9% | 1338 |
| Jamundí | 5.8% | 63.7% | 17.6% | 10.5% | 2.5% | 813 |
| La Guajira | 9.5% | 54.1% | 18.9% | 14.0% | 3.4% | 3168 |
| Lorica | 10.7% | 53.3% | 15.9% | 17.1% | 3.1% | 1210 |
| Magangué | 12.0% | 47.0% | 19.6% | 17.5% | 3.9% | 1322 |
| Magdalena | 10.4% | 52.2% | 15.8% | 16.2% | 5.4% | 6778 |
| Maicao | 11.3% | 54.0% | 18.9% | 13.3% | 2.5% | 1598 |
| Malambo | 8.1% | 65.7% | 13.3% | 9.6% | 3.3% | 1034 |
| Manizales | 4.5% | 68.5% | 18.4% | 7.0% | 1.5% | 2464 |
| Medellín | 6.8% | 64.9% | 18.0% | 8.1% | 2.2% | 15397 |
| Meta | 6.9% | 63.1% | 17.7% | 9.6% | 2.7% | 4322 |
| Montería | 8.9% | 58.3% | 17.0% | 12.4% | 3.4% | 3813 |
| Mosquera | 5.7% | 68.3% | 19.6% | 5.7% | 0.6% | 853 |
| Nariño | 6.4% | 67.5% | 12.8% | 10.6% | 2.7% | 7671 |
| Neiva | 6.9% | 64.0% | 17.7% | 9.7% | 1.8% | 2916 |
| Norte de Santander | 6.7% | 67.9% | 15.2% | 8.8% | 1.4% | 6070 |
| Palmira | 4.9% | 70.7% | 17.2% | 5.6% | 1.6% | 2029 |
| Pasto | 4.6% | 72.6% | 14.5% | 7.4% | 1.0% | 3139 |
| Pereira | 5.9% | 66.0% | 19.2% | 7.2% | 1.8% | 3308 |
| Piedecuesta | 4.9% | 66.9% | 18.5% | 7.7% | 2.0% | 1127 |
| Pitalito | 6.7% | 66.2% | 18.5% | 7.4% | 1.3% | 1278 |
| Popayán | 4.6% | 71.5% | 14.9% | 7.5% | 1.5% | 2111 |
| Putumayo | 7.1% | 62.1% | 17.1% | 12.0% | 1.6% | 3175 |
| Quibdó | 10.2% | 56.2% | 14.8% | 14.3% | 4.5% | 1100 |
| Quindío | 6.8% | 64.4% | 18.7% | 7.9% | 2.2% | 2049 |
| Riohacha | 8.2% | 61.9% | 16.7% | 10.4% | 2.8% | 2024 |
| Rionegro | 6.7% | 64.9% | 20.1% | 7.4% | 1.0% | 812 |
| Risaralda | 7.4% | 64.6% | 16.3% | 9.3% | 2.4% | 2284 |
| Sabaneta | 4.2% | 70.3% | 21.8% | 3.0% | 0.6% | 330 |
| Sahagún | 9.7% | 52.9% | 19.3% | 15.0% | 3.1% | 997 |
| San Andrés | 9.8% | 59.1% | 17.5% | 11.7% | 1.9% | 418 |
| Santa Marta | 7.3% | 60.7% | 19.4% | 9.4% | 3.3% | 4045 |
| Santander | 5.6% | 67.1% | 16.2% | 10.0% | 1.1% | 6364 |

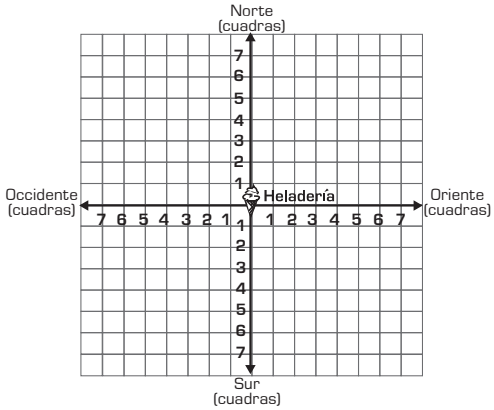
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 8.4% | 61.1% | 17.4% | 10.4% | 2.8% | 2577 |
| Soacha | 5.1% | 69.7% | 17.4% | 6.6% | 1.1% | 4049 |
| Sogamoso | 4.0% | 70.7% | 16.9% | 7.7% | 0.7% | 1118 |
| Soledad | 6.9% | 66.6% | 16.0% | 8.9% | 1.6% | 3865 |
| Sucre | 10.5% | 53.2% | 16.6% | 16.3% | 3.4% | 6081 |
| Tolima | 7.3% | 62.3% | 16.9% | 11.2% | 2.2% | 7516 |
| Tuluá | 5.4% | 66.4% | 18.7% | 7.5% | 2.0% | 1638 |
| Tumaco | 10.7% | 51.9% | 13.8% | 16.4% | 7.1% | 2161 |
| Tunja | 5.3% | 73.4% | 13.1% | 7.2% | 0.9% | 1288 |
| Turbo | 13.5% | 46.7% | 19.6% | 15.8% | 4.4% | 1474 |
| Uribia | 14.5% | 48.4% | 15.1% | 14.4% | 7.5% | 729 |
| Valle del Cauca | 5.7% | 64.9% | 19.3% | 7.9% | 2.2% | 6459 |
| Valledupar | 6.6% | 62.1% | 19.1% | 8.8% | 3.4% | 3519 |
| Vaupés | 0.0% | 40.0% | 0.0% | 0.0% | 60.0% | 5 |
| Vichada | 7.9% | 57.6% | 16.8% | 14.9% | 2.8% | 543 |
| Villavicencio | 4.5% | 70.7% | 17.4% | 6.3% | 1.2% | 4132 |
| Yopal | 5.9% | 68.3% | 16.0% | 8.0% | 1.9% | 1346 |
| Yumbo | 7.2% | 62.1% | 19.8% | 9.1% | 1.8% | 933 |
| Zipaquirá | 3.6% | 73.5% | 15.4% | 6.5% | 1.0% | 987 |
| Colombia | 6.9% | 63.9% | 17.1% | 9.7% | 2.4% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

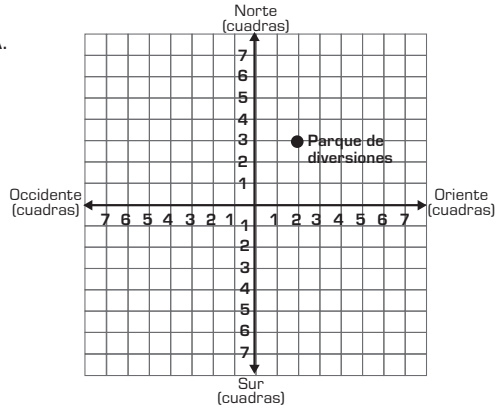
## • Pregunta 26.

Para llegar al parque de diversiones se deben recorrer 2 cuadras al oriente de la heladería y luego, 3 al norte.

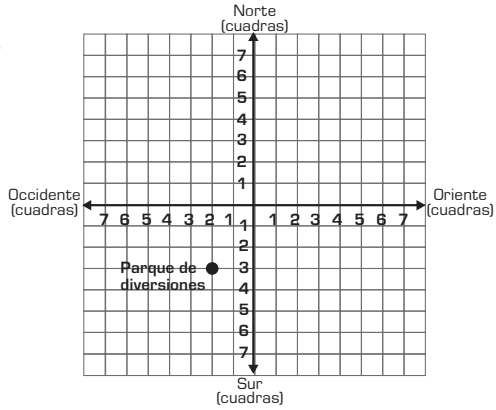



¿Dónde se ubica el parque de diversiones?

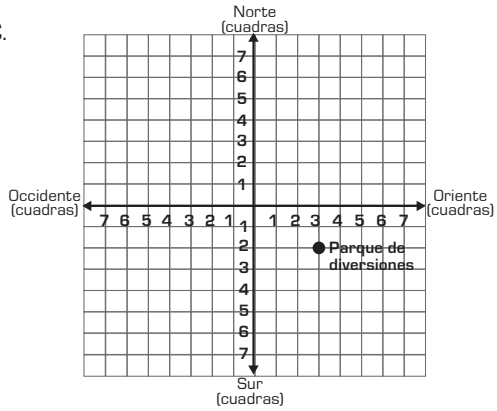
A.



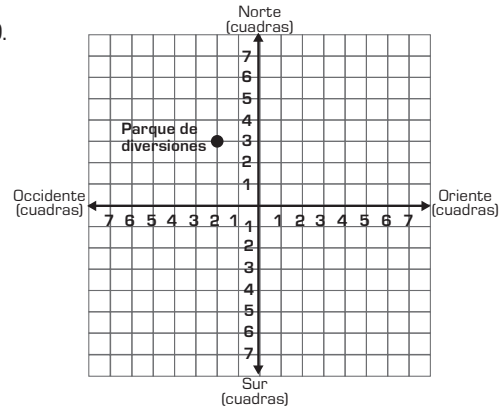

B.




C.




D.



## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Ubicar objetos con base en instrucciones referentes a dirección, distancia y posición |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 46.0% | 16.3% | 19.3% | 14.4% | 4.1% | 800 |
| Antioquia | 55.1% | 12.9% | 15.4% | 13.8% | 2.7% | 22998 |
| Apartadó | 51.3% | 14.2% | 16.1% | 14.6% | 3.8% | 1358 |
| Arauca | 57.1% | 11.8% | 14.6% | 14.0% | 2.4% | 2079 |
| Armenia | 59.6% | 9.5% | 16.4% | 13.4% | 1.1% | 1915 |
| Atlántico | 54.0% | 14.0% | 15.2% | 12.7% | 4.0% | 4465 |
| Barrancabermeja | 56.7% | 11.4% | 15.4% | 14.1% | 2.3% | 1796 |
| Barranquilla | 55.8% | 12.4% | 15.1% | 13.8% | 2.9% | 7800 |
| Bello | 58.6% | 9.7% | 14.6% | 15.6% | 1.5% | 2933 |
| Bogotá, D.C. | 61.9% | 8.3% | 12.9% | 14.1% | 2.7% | 47936 |
| Bolívar | 43.2% | 18.1% | 18.4% | 15.0% | 5.2% | 8304 |
| Boyacá | 54.9% | 12.5% | 16.3% | 14.5% | 1.8% | 6892 |
| Bucaramanga | 63.1% | 9.0% | 12.5% | 13.9% | 1.5% | 3830 |
| Buenaventura | 57.7% | 12.6% | 14.0% | 12.9% | 2.9% | 2848 |
| Buga | 60.3% | 10.2% | 12.8% | 12.8% | 3.9% | 822 |
| Caldas | 57.3% | 12.5% | 14.6% | 13.6% | 2.0% | 4508 |
| Cali | 61.9% | 9.5% | 12.8% | 13.1% | 2.7% | 14474 |
| Caquetá | 59.3% | 12.5% | 13.3% | 12.7% | 2.3% | 2765 |
| Cartagena | 57.3% | 12.3% | 13.9% | 12.8% | 3.7% | 8114 |
| Cartago | 55.2% | 8.9% | 16.4% | 15.5% | 3.9% | 811 |
| Casanare | 52.2% | 12.4% | 17.7% | 15.0% | 2.7% | 2226 |
| Cauca | 59.4% | 12.0% | 13.1% | 12.2% | 3.2% | 9635 |
| Cesar | 56.5% | 12.9% | 14.7% | 12.7% | 3.1% | 6652 |
| Chocó | 46.7% | 16.7% | 17.5% | 13.8% | 5.3% | 3467 |
| Chía | 64.7% | 7.4% | 13.6% | 12.9% | 1.4% | 961 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Ciénaga | 61.9% | 9.3% | 11.9% | 12.0% | 5.0% | 1144 |
| Cundinamarca | 60.9% | 9.4% | 13.7% | 14.2% | 1.8% | 11911 |
| Córdoba | 50.3% | 15.2% | 16.5% | 14.3% | 3.7% | 9883 |
| Cúcuta | 58.4% | 10.8% | 15.4% | 13.8% | 1.5% | 5554 |
| Dosquebradas | 56.6% | 10.9% | 15.5% | 14.0% | 3.0% | 1196 |
| Duitama | 67.4% | 7.5% | 10.7% | 14.0% | 0.4% | 1001 |
| Envigado | 62.9% | 7.2% | 12.6% | 15.5% | 1.8% | 989 |
| Facatativá | 59.0% | 10.6% | 12.7% | 15.0% | 2.8% | 1083 |
| Florencia | 55.7% | 13.3% | 14.6% | 14.2% | 2.2% | 1576 |
| Floridablanca | 60.3% | 8.7% | 14.1% | 15.1% | 1.8% | 1916 |
| Fusagasugá | 56.9% | 9.6% | 16.8% | 14.5% | 2.2% | 1029 |
| Girardot | 60.8% | 11.5% | 11.6% | 12.4% | 3.8% | 688 |
| Girón | 58.1% | 10.7% | 15.9% | 14.3% | 1.0% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2 |
| Guaviare | 49.8% | 13.0% | 17.6% | 15.9% | 3.7% | 807 |
| Huila | 56.5% | 12.5% | 15.5% | 13.9% | 1.6% | 6495 |
| Ibagué | 60.4% | 10.5% | 15.1% | 12.0% | 2.0% | 3872 |
| Ipiales | 58.1% | 9.5% | 16.1% | 15.3% | 0.9% | 1059 |
| Itagüí | 58.7% | 11.2% | 12.5% | 14.9% | 2.8% | 1338 |
| Jamundí | 58.3% | 9.8% | 14.0% | 15.6% | 2.2% | 813 |
| La Guajira | 52.7% | 15.9% | 14.8% | 12.8% | 3.8% | 3168 |
| Lorica | 46.1% | 18.5% | 17.3% | 15.4% | 2.7% | 1210 |
| Magangué | 43.0% | 17.3% | 18.6% | 16.7% | 4.4% | 1322 |
| Magdalena | 47.2% | 16.4% | 16.4% | 13.9% | 6.1% | 6778 |
| Maicao | 49.2% | 15.2% | 17.3% | 14.5% | 3.8% | 1598 |
| Malambo | 63.9% | 11.2% | 11.9% | 9.4% | 3.6% | 1034 |
| Manizales | 57.5% | 11.2% | 15.0% | 14.6% | 1.8% | 2464 |
| Medellín | 55.3% | 11.5% | 15.3% | 15.0% | 2.9% | 15397 |
| Meta | 54.2% | 12.8% | 15.7% | 14.1% | 3.1% | 4322 |
| Montería | 51.9% | 13.6% | 16.6% | 14.2% | 3.7% | 3813 |
| Mosquera | 63.2% | 9.7% | 11.5% | 14.0% | 1.6% | 853 |
| Nariño | 60.2% | 10.5% | 13.6% | 12.8% | 3.0% | 7671 |
| Neiva | 57.2% | 10.9% | 14.9% | 14.7% | 2.2% | 2916 |
| Norte de Santander | 60.8% | 10.3% | 13.4% | 13.9% | 1.6% | 6070 |
| Palmira | 60.1% | 9.0% | 13.5% | 15.0% | 2.4% | 2029 |
| Pasto | 62.2% | 9.2% | 13.0% | 14.1% | 1.5% | 3139 |
| Pereira | 57.0% | 11.4% | 14.8% | 14.3% | 2.6% | 3308 |
| Piedecuesta | 59.4% | 9.3% | 14.0% | 15.3% | 2.0% | 1127 |
| Pitalito | 60.7% | 11.1% | 13.6% | 13.2% | 1.3% | 1278 |

Continúa en la siguiente página

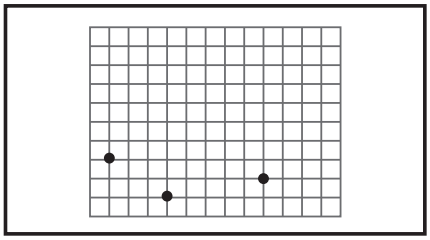
| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Popayán | 63.8% | 9.2% | 13.8% | 11.7% | 1.5% | 2111 |
| Putumayo | 54.4% | 12.9% | 16.1% | 15.0% | 1.6% | 3175 |
| Quibdó | 47.7% | 15.0% | 18.6% | 14.5% | 4.1% | 1100 |
| Quindío | 54.1% | 13.6% | 14.8% | 15.1% | 2.3% | 2049 |
| Riohacha | 54.0% | 13.8% | 16.1% | 12.5% | 3.8% | 2024 |
| Rionegro | 59.5% | 10.5% | 15.0% | 14.2% | 0.9% | 812 |
| Risaralda | 56.5% | 11.8% | 15.4% | 13.8% | 2.5% | 2284 |
| Sabaneta | 61.8% | 8.5% | 12.4% | 16.1% | 1.2% | 330 |
| Sahagún | 48.8% | 15.7% | 17.3% | 15.3% | 2.8% | 997 |
| San Andrés | 47.1% | 14.6% | 16.7% | 18.7% | 2.9% | 418 |
| Santa Marta | 54.1% | 12.6% | 15.8% | 14.1% | 3.3% | 4045 |
| Santander | 61.1% | 9.8% | 14.2% | 13.8% | 1.1% | 6364 |
| Sincelejo | 51.9% | 14.0% | 15.8% | 15.4% | 2.9% | 2577 |
| Soacha | 62.8% | 9.0% | 12.7% | 14.3% | 1.2% | 4049 |
| Sogamoso | 58.9% | 9.0% | 15.3% | 16.1% | 0.6% | 1118 |
| Soledad | 60.3% | 11.6% | 13.6% | 12.8% | 1.8% | 3865 |
| Sucre | 46.2% | 16.7% | 17.8% | 15.5% | 3.7% | 6081 |
| Tolima | 55.2% | 13.1% | 15.3% | 13.9% | 2.6% | 7516 |
| Tuluá | 60.4% | 9.8% | 13.4% | 14.3% | 2.1% | 1638 |
| Tumaco | 45.1% | 15.8% | 15.5% | 15.6% | 8.0% | 2161 |
| Tunja | 61.7% | 8.6% | 14.5% | 13.9% | 1.2% | 1288 |
| Turbo | 42.7% | 17.9% | 19.0% | 15.5% | 5.0% | 1474 |
| Uribia | 36.8% | 23.2% | 17.6% | 14.5% | 8.0% | 729 |
| Valle del Cauca | 56.4% | 11.9% | 15.0% | 13.9% | 2.7% | 6459 |
| Valledupar | 58.3% | 11.4% | 13.9% | 12.2% | 4.1% | 3519 |
| Vaupés | 20.0% | 0.0% | 0.0% | 20.0% | 60.0% | 5 |
| Vichada | 49.9% | 14.2% | 19.3% | 14.2% | 2.4% | 543 |
| Villavicencio | 61.7% | 9.4% | 13.6% | 13.7% | 1.6% | 4132 |
| Yopal | 57.5% | 10.8% | 12.7% | 16.6% | 2.3% | 1346 |
| Yumbo | 54.1% | 13.6% | 15.3% | 13.1% | 3.9% | 933 |
| Zipaquirá | 69.8% | 6.9% | 11.9% | 10.0% | 1.4% | 987 |
| Colombia | 56.9% | 11.7% | 14.7% | 13.9% | 2.8% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

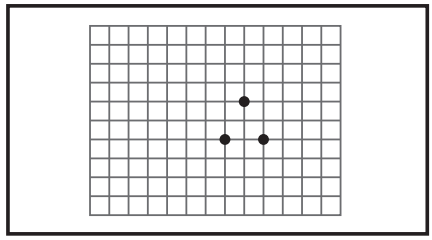
## • Pregunta 27.

Si unes tres puntos con líneas rectas puedes armar un triángulo. ¿Con cuál conjunto de puntos **NO** puedes hacerlo?

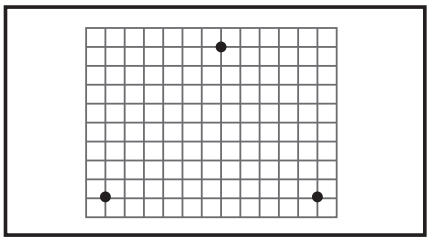
A.



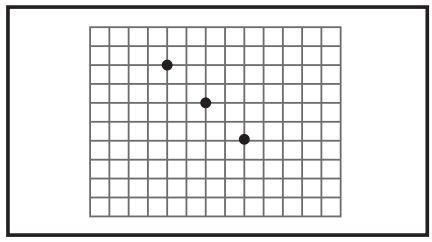
B.



C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Usar propiedades geométricas para solucionar problemas relativos a diseño y construcción de figuras planas. |
| **Nivel de desempeño** | Avanzado |
| **Respuesta Correcta** | D |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 14.6% | 15.4% | 30.0% | 35.1% | 4.9% | 800 |
| Antioquia | 16.0% | 17.9% | 24.5% | 38.7% | 3.0% | 22998 |
| Apartadó | 13.6% | 18.9% | 24.8% | 38.5% | 4.2% | 1358 |
| Arauca | 14.5% | 15.3% | 25.1% | 42.1% | 3.0% | 2079 |
| Armenia | 18.6% | 15.2% | 21.5% | 43.2% | 1.4% | 1915 |
| Atlántico | 13.9% | 15.5% | 26.4% | 39.8% | 4.5% | 4465 |
| Barrancabermeja | 14.7% | 14.0% | 23.9% | 45.2% | 2.2% | 1796 |
| Barranquilla | 14.6% | 15.1% | 24.0% | 43.2% | 3.1% | 7800 |
| Bello | 19.7% | 14.2% | 19.7% | 44.3% | 2.1% | 2933 |
| Bogotá, D.C. | 17.8% | 11.4% | 18.4% | 49.5% | 2.9% | 47936 |
| Bolívar | 13.4% | 19.8% | 28.9% | 32.0% | 5.9% | 8304 |
| Boyacá | 15.6% | 16.0% | 26.1% | 40.4% | 1.9% | 6892 |
| Bucaramanga | 16.6% | 10.6% | 19.7% | 51.4% | 1.6% | 3830 |
| Buenaventura | 16.3% | 15.9% | 24.6% | 40.2% | 3.0% | 2848 |
| Buga | 17.0% | 14.7% | 20.4% | 44.2% | 3.6% | 822 |
| Caldas | 18.1% | 14.6% | 23.1% | 41.8% | 2.4% | 4508 |
| Cali | 19.4% | 12.3% | 18.8% | 46.8% | 2.8% | 14474 |
| Caquetá | 13.2% | 17.0% | 27.8% | 39.5% | 2.6% | 2765 |
| Cartagena | 14.0% | 14.2% | 22.3% | 45.8% | 3.8% | 8114 |
| Cartago | 20.6% | 15.3% | 21.7% | 38.8% | 3.6% | 811 |
| Casanare | 16.4% | 16.9% | 26.5% | 37.6% | 2.5% | 2226 |
| Cauca | 12.6% | 14.6% | 24.7% | 44.5% | 3.6% | 9635 |
| Cesar | 13.1% | 17.3% | 24.9% | 41.6% | 3.2% | 6652 |
| Chocó | 15.4% | 18.6% | 27.0% | 33.3% | 5.7% | 3467 |
| Chía | 18.5% | 9.4% | 17.5% | 53.7% | 0.9% | 961 |
| Ciénaga | 13.3% | 17.3% | 23.4% | 41.6% | 4.4% | 1144 |
| Cundinamarca | 15.7% | 12.3% | 22.4% | 47.5% | 2.0% | 11911 |
| Córdoba | 13.5% | 18.2% | 27.8% | 36.6% | 3.8% | 9883 |
| Cúcuta | 17.1% | 14.2% | 23.7% | 43.5% | 1.5% | 5554 |
| Dosquebradas | 18.8% | 12.5% | 21.0% | 44.6% | 3.0% | 1196 |
| Duitama | 19.2% | 7.8% | 12.9% | 59.6% | 0.5% | 1001 |
| Envigado | 21.9% | 8.6% | 13.3% | 54.5% | 1.6% | 989 |
| Facatativá | 17.4% | 10.9% | 18.3% | 50.2% | 3.2% | 1083 |
| Florencia | 14.5% | 18.6% | 28.5% | 36.4% | 2.0% | 1576 |
| Floridablanca | 19.8% | 9.9% | 17.5% | 51.0% | 1.7% | 1916 |
| Fusagasugá | 17.1% | 14.3% | 23.4% | 43.3% | 1.8% | 1029 |
| Girardot | 16.6% | 18.3% | 24.7% | 37.4% | 3.1% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 17.1% | 13.9% | 22.0% | 45.7% | 1.3% | 1046 |
| Guainía | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2 |
| Guaviare | 15.0% | 19.8% | 27.4% | 34.0% | 3.8% | 807 |
| Huila | 14.1% | 16.3% | 26.0% | 41.8% | 1.8% | 6495 |
| Ibagué | 16.2% | 13.9% | 21.0% | 46.4% | 2.5% | 3872 |
| Ipiales | 18.9% | 13.7% | 17.5% | 48.5% | 1.4% | 1059 |
| Itagüí | 19.3% | 14.9% | 19.3% | 44.4% | 2.1% | 1338 |
| Jamundí | 20.3% | 13.8% | 25.5% | 37.5% | 3.0% | 813 |
| La Guajira | 13.6% | 17.2% | 26.2% | 39.0% | 4.0% | 3168 |
| Lorica | 15.3% | 17.9% | 26.4% | 36.6% | 3.8% | 1210 |
| Magangué | 15.8% | 19.7% | 28.9% | 31.2% | 4.3% | 1322 |
| Magdalena | 12.1% | 17.5% | 28.2% | 35.7% | 6.4% | 6778 |
| Maicao | 13.9% | 19.1% | 27.6% | 36.2% | 3.1% | 1598 |
| Malambo | 10.0% | 16.2% | 20.6% | 49.5% | 3.8% | 1034 |
| Manizales | 21.6% | 12.0% | 19.0% | 45.3% | 2.2% | 2464 |
| Medellín | 19.5% | 15.0% | 21.2% | 41.6% | 2.6% | 15397 |
| Meta | 15.2% | 16.6% | 27.5% | 37.4% | 3.4% | 4322 |
| Montería | 14.9% | 16.8% | 25.4% | 39.2% | 3.7% | 3813 |
| Mosquera | 15.9% | 10.9% | 21.5% | 50.5% | 1.2% | 853 |
| Nariño | 14.1% | 13.6% | 21.7% | 47.5% | 3.0% | 7671 |
| Neiva | 16.9% | 14.5% | 25.9% | 40.5% | 2.2% | 2916 |
| Norte de Santander | 15.2% | 14.7% | 22.9% | 45.5% | 1.7% | 6070 |
| Palmira | 19.5% | 12.8% | 19.1% | 47.0% | 1.7% | 2029 |
| Pasto | 18.1% | 10.3% | 18.5% | 51.5% | 1.6% | 3139 |
| Pereira | 17.7% | 15.7% | 20.9% | 42.8% | 2.9% | 3308 |
| Piedecuesta | 17.2% | 10.5% | 18.9% | 51.3% | 2.1% | 1127 |
| Pitalito | 14.2% | 16.9% | 24.5% | 42.6% | 1.8% | 1278 |
| Popayán | 18.6% | 10.3% | 20.8% | 48.9% | 1.4% | 2111 |
| Putumayo | 16.3% | 15.5% | 27.9% | 38.2% | 2.2% | 3175 |
| Quibdó | 12.6% | 16.7% | 21.8% | 44.0% | 4.8% | 1100 |
| Quindío | 16.5% | 15.9% | 27.9% | 37.0% | 2.7% | 2049 |
| Riohacha | 15.0% | 16.8% | 24.5% | 40.0% | 3.7% | 2024 |
| Rionegro | 19.0% | 12.4% | 18.0% | 49.5% | 1.1% | 812 |
| Risaralda | 15.3% | 17.3% | 27.9% | 36.8% | 2.7% | 2284 |
| Sabaneta | 21.5% | 8.8% | 14.5% | 53.3% | 1.8% | 330 |
| Sahagún | 14.5% | 15.6% | 28.0% | 39.0% | 2.8% | 997 |
| San Andrés | 19.6% | 17.0% | 26.6% | 34.2% | 2.6% | 418 |
| Santa Marta | 16.5% | 16.2% | 22.4% | 41.0% | 4.0% | 4045 |
| Santander | 14.1% | 13.2% | 22.8% | 48.4% | 1.4% | 6364 |

Continúa en la siguiente página

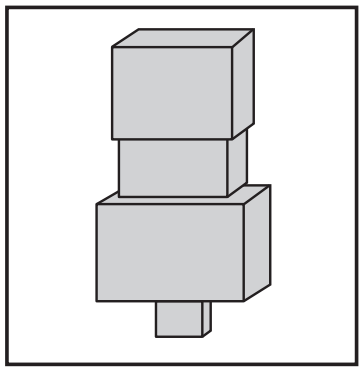
| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 13.9% | 14.6% | 24.3% | 44.0% | 3.3% | 2577 |
| Soacha | 18.0% | 12.3% | 20.4% | 47.9% | 1.5% | 4049 |
| Sogamoso | 17.9% | 12.7% | 19.8% | 48.9% | 0.7% | 1118 |
| Soledad | 14.3% | 14.2% | 22.1% | 47.9% | 1.4% | 3865 |
| Sucre | 13.1% | 18.9% | 28.7% | 35.4% | 3.9% | 6081 |
| Tolima | 14.6% | 17.5% | 27.0% | 38.4% | 2.7% | 7516 |
| Tuluá | 19.5% | 13.2% | 18.4% | 46.0% | 2.9% | 1638 |
| Tumaco | 13.6% | 19.3% | 28.3% | 31.1% | 7.7% | 2161 |
| Tunja | 17.9% | 8.9% | 17.9% | 54.0% | 1.4% | 1288 |
| Turbo | 14.6% | 23.6% | 27.3% | 29.6% | 5.0% | 1474 |
| Uribia | 20.2% | 18.8% | 28.1% | 25.8% | 7.1% | 729 |
| Valle del Cauca | 17.6% | 16.0% | 24.2% | 39.4% | 2.9% | 6459 |
| Valledupar | 14.9% | 13.9% | 22.7% | 44.7% | 3.8% | 3519 |
| Vaupés | 0.0% | 20.0% | 0.0% | 20.0% | 60.0% | 5 |
| Vichada | 13.3% | 19.0% | 31.5% | 33.3% | 2.9% | 543 |
| Villavicencio | 16.5% | 13.4% | 21.3% | 47.2% | 1.6% | 4132 |
| Yopal | 16.6% | 13.2% | 25.3% | 42.1% | 2.8% | 1346 |
| Yumbo | 19.1% | 16.0% | 24.1% | 38.6% | 2.3% | 933 |
| Zipaquirá | 16.4% | 12.2% | 18.1% | 52.1% | 1.2% | 987 |
| Colombia | 16.1% | 14.8% | 23.1% | 43.1% | 2.9% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

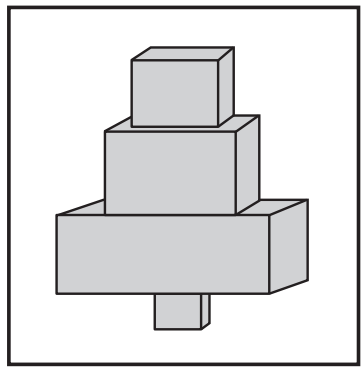
## • Pregunta 28.

Se armó una torre con bloques, empezando con el más grande. Cada bloque es más pequeño que el anterior. ¿Cuál torre se armó?

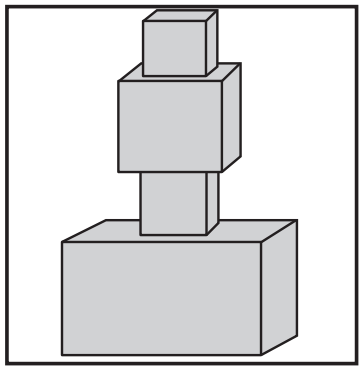
A.



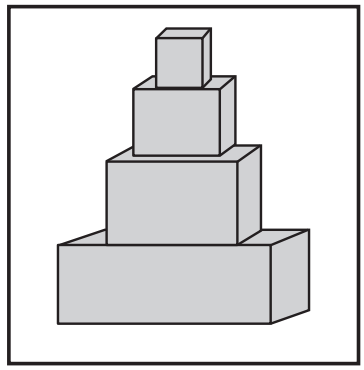
B.



C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Ordenar objetos bidimensionales y tridimensionales de acuerdo con atributos medibles. |
| **Nivel de desempeño** | Mínimo |
| **Respuesta Correcta** | D |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 7.4% | 9.1% | 14.5% | 66.3% | 2.8% | 800 |
| Antioquia | 6.8% | 9.2% | 13.8% | 67.0% | 3.2% | 22998 |
| Apartadó | 8.1% | 11.6% | 13.3% | 63.0% | 4.1% | 1358 |
| Arauca | 7.0% | 7.9% | 12.5% | 70.1% | 2.5% | 2079 |
| Armenia | 7.3% | 8.8% | 14.0% | 68.9% | 1.0% | 1915 |
| Atlántico | 8.7% | 9.5% | 13.9% | 62.8% | 5.2% | 4465 |
| Barrancabermeja | 7.2% | 8.9% | 13.3% | 67.4% | 3.2% | 1796 |
| Barranquilla | 6.7% | 7.9% | 12.4% | 69.7% | 3.3% | 7800 |
| Bello | 7.0% | 7.5% | 12.0% | 71.6% | 1.9% | 2933 |
| Bogotá, D.C. | 6.5% | 5.9% | 9.5% | 75.0% | 3.0% | 47936 |
| Bolívar | 9.9% | 12.6% | 16.1% | 55.2% | 6.2% | 8304 |
| Boyacá | 7.6% | 8.9% | 14.2% | 67.4% | 1.9% | 6892 |
| Bucaramanga | 6.8% | 6.7% | 10.1% | 74.6% | 1.8% | 3830 |
| Buenaventura | 7.5% | 8.0% | 13.1% | 68.0% | 3.4% | 2848 |
| Buga | 5.8% | 5.4% | 12.7% | 71.7% | 4.5% | 822 |
| Caldas | 6.6% | 8.5% | 14.5% | 68.3% | 2.1% | 4508 |
| Cali | 6.8% | 6.1% | 11.5% | 72.8% | 2.8% | 14474 |
| Caquetá | 6.5% | 8.8% | 14.0% | 68.4% | 2.4% | 2765 |
| Cartagena | 6.8% | 8.6% | 10.4% | 70.3% | 3.9% | 8114 |
| Cartago | 7.9% | 8.8% | 11.2% | 68.4% | 3.7% | 811 |
| Casanare | 6.0% | 8.4% | 14.1% | 68.4% | 3.1% | 2226 |
| Cauca | 6.2% | 8.0% | 13.3% | 68.7% | 3.8% | 9635 |
| Cesar | 6.4% | 9.4% | 14.3% | 66.2% | 3.7% | 6652 |
| Chocó | 8.6% | 13.0% | 15.1% | 56.9% | 6.5% | 3467 |
| Chía | 5.3% | 4.3% | 11.4% | 77.0% | 2.0% | 961 |
| Ciénaga | 7.2% | 7.8% | 10.6% | 69.3% | 5.2% | 1144 |
| Cundinamarca | 5.8% | 6.7% | 10.9% | 74.5% | 2.1% | 11911 |
| Córdoba | 8.6% | 10.7% | 14.6% | 61.7% | 4.3% | 9883 |
| Cúcuta | 7.9% | 7.7% | 10.7% | 71.9% | 1.8% | 5554 |
| Dosquebradas | 8.0% | 8.0% | 13.6% | 67.1% | 3.3% | 1196 |
| Duitama | 4.9% | 6.5% | 10.6% | 77.4% | 0.6% | 1001 |
| Envigado | 5.8% | 5.6% | 9.6% | 77.2% | 1.8% | 989 |
| Facatativá | 5.5% | 5.3% | 9.6% | 76.1% | 3.5% | 1083 |
| Florencia | 8.4% | 8.1% | 13.5% | 67.4% | 2.6% | 1576 |
| Floridablanca | 8.2% | 5.4% | 10.7% | 73.9% | 1.9% | 1916 |
| Fusagasugá | 8.4% | 7.5% | 9.5% | 71.2% | 3.4% | 1029 |
| Girardot | 9.6% | 9.4% | 9.7% | 67.7% | 3.5% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 6.6% | 8.2% | 12.2% | 71.0% | 1.9% | 1046 |
| Guainía | 0.0% | 0.0% | 50.0% | 50.0% | 0.0% | 2 |
| Guaviare | 8.2% | 9.2% | 10.4% | 68.9% | 3.3% | 807 |
| Huila | 6.9% | 7.9% | 14.7% | 68.6% | 1.9% | 6495 |
| Ibagué | 6.9% | 7.0% | 11.2% | 72.7% | 2.2% | 3872 |
| Ipiales | 7.9% | 7.2% | 12.4% | 70.9% | 1.6% | 1059 |
| Itagüí | 7.0% | 7.8% | 12.0% | 70.5% | 2.8% | 1338 |
| Jamundí | 6.9% | 7.9% | 11.6% | 71.3% | 2.3% | 813 |
| La Guajira | 7.3% | 9.7% | 14.2% | 64.5% | 4.3% | 3168 |
| Lorica | 8.9% | 11.2% | 15.5% | 61.1% | 3.4% | 1210 |
| Magangué | 11.0% | 14.8% | 18.0% | 51.3% | 4.9% | 1322 |
| Magdalena | 8.8% | 11.9% | 15.3% | 57.2% | 6.8% | 6778 |
| Maicao | 8.3% | 11.1% | 14.4% | 62.0% | 4.2% | 1598 |
| Malambo | 6.4% | 8.5% | 9.6% | 70.5% | 5.0% | 1034 |
| Manizales | 6.7% | 6.4% | 12.4% | 72.6% | 1.9% | 2464 |
| Medellín | 7.3% | 7.7% | 12.5% | 69.5% | 3.1% | 15397 |
| Meta | 6.7% | 8.3% | 13.3% | 68.1% | 3.6% | 4322 |
| Montería | 8.7% | 9.3% | 12.9% | 65.1% | 4.0% | 3813 |
| Mosquera | 7.4% | 5.6% | 8.9% | 76.3% | 1.8% | 853 |
| Nariño | 5.6% | 8.0% | 13.0% | 70.0% | 3.3% | 7671 |
| Neiva | 7.6% | 8.3% | 12.6% | 68.8% | 2.8% | 2916 |
| Norte de Santander | 6.2% | 7.6% | 11.8% | 72.5% | 1.9% | 6070 |
| Palmira | 7.0% | 6.3% | 10.5% | 74.1% | 2.1% | 2029 |
| Pasto | 6.6% | 6.7% | 12.2% | 72.9% | 1.5% | 3139 |
| Pereira | 7.4% | 7.6% | 13.8% | 68.6% | 2.6% | 3308 |
| Piedecuesta | 6.2% | 6.6% | 10.2% | 75.1% | 2.0% | 1127 |
| Pitalito | 6.9% | 7.2% | 12.6% | 71.5% | 1.8% | 1278 |
| Popayán | 5.6% | 6.4% | 10.6% | 75.1% | 2.3% | 2111 |
| Putumayo | 7.3% | 8.6% | 14.2% | 68.0% | 1.9% | 3175 |
| Quibdó | 6.2% | 9.6% | 15.3% | 62.9% | 6.0% | 1100 |
| Quindío | 7.4% | 8.3% | 12.7% | 68.6% | 3.0% | 2049 |
| Riohacha | 7.6% | 9.6% | 11.7% | 67.8% | 3.3% | 2024 |
| Rionegro | 6.2% | 7.3% | 11.0% | 74.6% | 1.0% | 812 |
| Risaralda | 6.5% | 8.9% | 14.8% | 66.5% | 3.3% | 2284 |
| Sabaneta | 3.9% | 5.8% | 13.3% | 75.5% | 1.5% | 330 |
| Sahagún | 7.4% | 10.8% | 14.9% | 63.5% | 3.3% | 997 |
| San Andrés | 7.4% | 14.6% | 12.4% | 63.2% | 2.4% | 418 |
| Santa Marta | 7.4% | 7.5% | 12.0% | 68.8% | 4.4% | 4045 |
| Santander | 5.5% | 7.6% | 12.6% | 72.5% | 1.8% | 6364 |

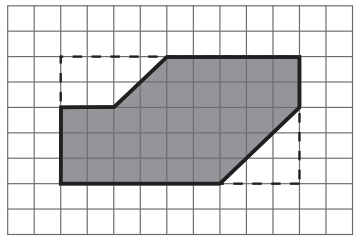
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 8.1% | 8.7% | 11.7% | 68.3% | 3.3% | 2577 |
| Soacha | 6.3% | 6.5% | 9.3% | 76.3% | 1.6% | 4049 |
| Sogamoso | 7.5% | 6.9% | 11.0% | 73.9% | 0.7% | 1118 |
| Soledad | 7.4% | 7.7% | 10.4% | 72.7% | 1.8% | 3865 |
| Sucre | 9.2% | 12.3% | 15.6% | 58.8% | 4.2% | 6081 |
| Tolima | 6.5% | 9.5% | 13.6% | 67.5% | 3.0% | 7516 |
| Tuluá | 7.0% | 6.5% | 12.0% | 71.9% | 2.6% | 1638 |
| Tumaco | 8.1% | 10.2% | 13.5% | 58.0% | 10.2% | 2161 |
| Tunja | 6.7% | 5.2% | 10.1% | 76.6% | 1.5% | 1288 |
| Turbo | 9.1% | 13.5% | 15.9% | 55.7% | 5.8% | 1474 |
| Uribia | 8.6% | 14.4% | 12.9% | 55.6% | 8.5% | 729 |
| Valle del Cauca | 7.1% | 8.1% | 13.1% | 68.4% | 3.3% | 6459 |
| Valledupar | 6.1% | 8.4% | 11.5% | 69.7% | 4.3% | 3519 |
| Vaupés | 0.0% | 0.0% | 0.0% | 40.0% | 60.0% | 5 |
| Vichada | 6.3% | 6.3% | 15.5% | 68.5% | 3.5% | 543 |
| Villavicencio | 6.8% | 7.2% | 10.8% | 73.6% | 1.7% | 4132 |
| Yopal | 8.4% | 6.2% | 12.6% | 70.1% | 2.6% | 1346 |
| Yumbo | 7.4% | 8.7% | 12.4% | 68.4% | 3.1% | 933 |
| Zipaquirá | 5.3% | 5.5% | 9.5% | 78.1% | 1.6% | 987 |
| Colombia | 7.1% | 8.1% | 12.4% | 69.2% | 3.2% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

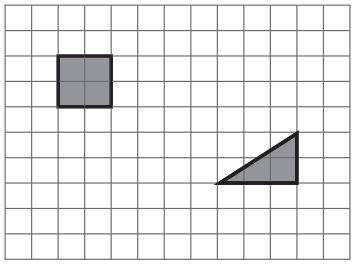
## • Pregunta 29.

Karina está armando un rectángulo y le faltaron dos piezas.

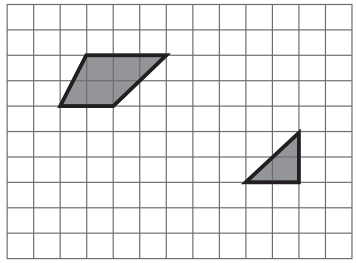


¿Cuáles piezas le faltaron?

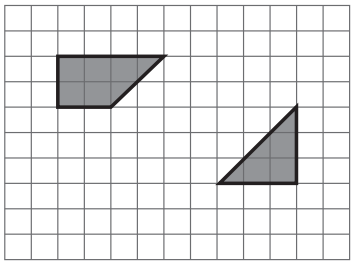
A.



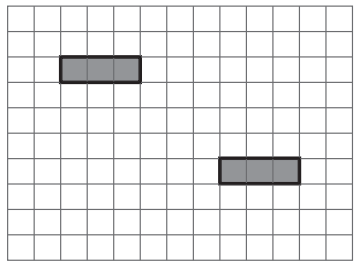
B.



C.



D.



## • Estructura

| | |
|---|---|
| **Competencia** | Planteamiento y resolución de problemas |
| **Componente** | Geométrico - métrico |
| **Afirmación** | Usar propiedades geométricas para solucionar problemas relativos a diseño y construcción de figuras planas. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | C |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 9.0% | 14.3% | 59.5% | 13.4% | 3.9% | 800 |
| Antioquia | 7.8% | 16.4% | 62.9% | 9.7% | 3.2% | 22998 |
| Apartadó | 8.3% | 17.1% | 59.6% | 10.8% | 4.3% | 1358 |
| Arauca | 5.9% | 16.1% | 66.5% | 8.9% | 2.5% | 2079 |
| Armenia | 6.3% | 15.9% | 69.1% | 7.4% | 1.3% | 1915 |
| Atlántico | 7.4% | 19.0% | 59.2% | 8.8% | 5.6% | 4465 |
| Barrancabermeja | 6.5% | 15.9% | 67.8% | 6.8% | 3.0% | 1796 |
| Barranquilla | 6.4% | 17.3% | 65.8% | 7.0% | 3.4% | 7800 |
| Bello | 5.8% | 16.9% | 68.3% | 7.3% | 1.6% | 2933 |
| Bogotá, D.C. | 4.5% | 15.6% | 72.1% | 4.7% | 3.1% | 47936 |
| Bolívar | 11.3% | 18.6% | 51.2% | 12.6% | 6.4% | 8304 |
| Boyacá | 7.8% | 18.0% | 63.2% | 9.0% | 2.0% | 6892 |
| Bucaramanga | 4.6% | 14.7% | 74.1% | 4.5% | 2.1% | 3830 |
| Buenaventura | 7.8% | 16.2% | 63.8% | 8.8% | 3.4% | 2848 |
| Buga | 5.1% | 16.1% | 69.5% | 5.1% | 4.3% | 822 |
| Caldas | 7.0% | 17.0% | 64.7% | 9.2% | 2.1% | 4508 |
| Cali | 5.0% | 15.9% | 70.5% | 5.8% | 2.8% | 14474 |
| Caquetá | 8.8% | 15.3% | 62.4% | 11.1% | 2.4% | 2765 |
| Cartagena | 6.2% | 17.1% | 64.4% | 8.0% | 4.2% | 8114 |
| Cartago | 5.1% | 17.9% | 66.6% | 6.9% | 3.6% | 811 |
| Casanare | 6.8% | 17.4% | 64.6% | 7.9% | 3.3% | 2226 |
| Cauca | 7.4% | 15.2% | 63.8% | 9.7% | 3.9% | 9635 |
| Cesar | 7.8% | 16.1% | 63.3% | 9.2% | 3.6% | 6652 |
| Chocó | 12.2% | 16.1% | 49.5% | 15.4% | 6.8% | 3467 |
| Chía | 5.2% | 16.8% | 71.0% | 5.0% | 2.1% | 961 |
| Ciénaga | 7.3% | 16.6% | 63.9% | 7.0% | 5.2% | 1144 |
| Cundinamarca | 5.9% | 16.0% | 69.9% | 6.1% | 2.1% | 11911 |
| Córdoba | 10.8% | 17.5% | 55.4% | 12.0% | 4.2% | 9883 |
| Cúcuta | 5.7% | 17.1% | 70.0% | 5.4% | 1.7% | 5554 |
| Dosquebradas | 5.8% | 14.4% | 69.1% | 7.0% | 3.7% | 1196 |
| Duitama | 4.7% | 12.3% | 78.5% | 3.7% | 0.8% | 1001 |
| Envigado | 4.0% | 15.5% | 75.2% | 4.0% | 1.2% | 989 |
| Facatativá | 5.9% | 15.8% | 70.5% | 5.2% | 2.6% | 1083 |
| Florencia | 5.9% | 17.9% | 65.0% | 8.4% | 2.8% | 1576 |
| Floridablanca | 4.5% | 13.9% | 75.6% | 3.9% | 2.1% | 1916 |
| Fusagasugá | 4.9% | 18.1% | 69.0% | 5.9% | 2.1% | 1029 |
| Girardot | 6.0% | 19.5% | 63.2% | 7.7% | 3.6% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 5.1% | 17.5% | 70.4% | 5.8% | 1.2% | 1046 |
| Guainía | 0.0% | 50.0% | 50.0% | 0.0% | 0.0% | 2 |
| Guaviare | 9.0% | 14.7% | 59.6% | 12.0% | 4.6% | 807 |
| Huila | 6.9% | 18.0% | 64.2% | 8.7% | 2.2% | 6495 |
| Ibagué | 5.4% | 15.9% | 70.6% | 5.7% | 2.3% | 3872 |
| Ipiales | 5.0% | 16.1% | 72.0% | 5.9% | 1.0% | 1059 |
| Itagüí | 7.5% | 16.4% | 65.3% | 8.4% | 2.4% | 1338 |
| Jamundí | 5.5% | 17.3% | 67.7% | 6.5% | 3.0% | 813 |
| La Guajira | 9.7% | 15.8% | 58.6% | 11.5% | 4.5% | 3168 |
| Lorica | 10.5% | 18.7% | 55.9% | 11.2% | 3.7% | 1210 |
| Magangué | 13.0% | 20.3% | 50.1% | 12.6% | 4.0% | 1322 |
| Magdalena | 10.2% | 17.2% | 54.1% | 11.8% | 6.7% | 6778 |
| Maicao | 10.5% | 19.2% | 53.8% | 12.1% | 4.5% | 1598 |
| Malambo | 6.1% | 16.5% | 63.9% | 9.1% | 4.4% | 1034 |
| Manizales | 5.3% | 17.1% | 69.3% | 6.1% | 2.2% | 2464 |
| Medellín | 6.2% | 17.0% | 66.1% | 7.5% | 3.1% | 15397 |
| Meta | 6.6% | 18.9% | 63.0% | 8.0% | 3.6% | 4322 |
| Montería | 7.2% | 16.6% | 61.4% | 10.3% | 4.4% | 3813 |
| Mosquera | 5.3% | 15.0% | 73.0% | 5.3% | 1.4% | 853 |
| Nariño | 6.6% | 15.1% | 66.5% | 8.2% | 3.5% | 7671 |
| Neiva | 5.9% | 17.7% | 67.1% | 6.4% | 2.9% | 2916 |
| Norte de Santander | 6.9% | 16.2% | 68.1% | 7.1% | 1.7% | 6070 |
| Palmira | 4.3% | 15.4% | 72.5% | 5.4% | 2.4% | 2029 |
| Pasto | 4.4% | 15.8% | 73.4% | 4.9% | 1.5% | 3139 |
| Pereira | 6.2% | 16.7% | 66.5% | 7.1% | 3.4% | 3308 |
| Piedecuesta | 4.4% | 16.0% | 73.6% | 3.8% | 2.2% | 1127 |
| Pitalito | 7.0% | 16.8% | 66.9% | 7.4% | 1.9% | 1278 |
| Popayán | 5.3% | 16.5% | 71.5% | 5.0% | 1.7% | 2111 |
| Putumayo | 7.8% | 16.5% | 63.7% | 9.9% | 2.2% | 3175 |
| Quibdó | 10.1% | 16.3% | 58.2% | 10.5% | 5.0% | 1100 |
| Quindío | 7.1% | 15.9% | 65.9% | 7.7% | 3.4% | 2049 |
| Riohacha | 8.3% | 13.1% | 64.1% | 10.5% | 4.0% | 2024 |
| Rionegro | 5.7% | 16.3% | 69.3% | 7.0% | 1.7% | 812 |
| Risaralda | 7.4% | 16.1% | 64.6% | 9.1% | 2.8% | 2284 |
| Sabaneta | 3.9% | 15.2% | 73.3% | 5.5% | 2.1% | 330 |
| Sahagún | 8.9% | 17.9% | 58.7% | 10.6% | 3.9% | 997 |
| San Andrés | 8.4% | 17.9% | 59.8% | 10.5% | 3.3% | 418 |
| Santa Marta | 7.1% | 18.3% | 61.9% | 8.4% | 4.3% | 4045 |
| Santander | 6.0% | 15.0% | 70.4% | 7.1% | 1.5% | 6364 |

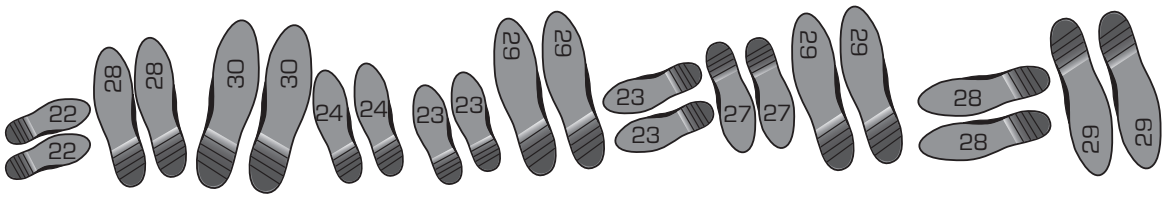
Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 6.7% | 18.2% | 63.8% | 8.3% | 3.1% | 2577 |
| Soacha | 4.1% | 16.3% | 73.0% | 5.3% | 1.3% | 4049 |
| Sogamoso | 5.2% | 18.1% | 70.3% | 5.7% | 0.7% | 1118 |
| Soledad | 5.5% | 16.4% | 68.9% | 7.2% | 2.0% | 3865 |
| Sucre | 11.0% | 18.8% | 53.1% | 12.7% | 4.4% | 6081 |
| Tolima | 7.8% | 17.1% | 62.8% | 9.3% | 3.0% | 7516 |
| Tuluá | 5.1% | 15.5% | 69.9% | 6.8% | 2.7% | 1638 |
| Tumaco | 10.4% | 14.8% | 54.1% | 11.3% | 9.4% | 2161 |
| Tunja | 5.0% | 13.9% | 74.5% | 5.0% | 1.6% | 1288 |
| Turbo | 10.7% | 19.8% | 49.3% | 15.1% | 5.2% | 1474 |
| Uribia | 15.1% | 20.2% | 41.7% | 15.0% | 8.1% | 729 |
| Valle del Cauca | 5.9% | 16.3% | 67.1% | 7.3% | 3.5% | 6459 |
| Valledupar | 6.1% | 14.7% | 66.1% | 8.8% | 4.3% | 3519 |
| Vaupés | 0.0% | 20.0% | 20.0% | 0.0% | 60.0% | 5 |
| Vichada | 8.3% | 14.9% | 58.9% | 14.0% | 3.9% | 543 |
| Villavicencio | 4.7% | 15.5% | 72.8% | 5.2% | 1.8% | 4132 |
| Yopal | 4.2% | 15.1% | 72.1% | 6.1% | 2.5% | 1346 |
| Yumbo | 5.4% | 17.3% | 65.3% | 9.3% | 2.8% | 933 |
| Zipaquirá | 5.0% | 16.1% | 73.6% | 4.3% | 1.1% | 987 |
| Colombia | 6.8% | 16.5% | 65.6% | 7.9% | 3.2% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 30.

Daniel organiza sus zapatos y los de sus hermanos. Observa las tallas.




La menor y la mayor talla son

A. 22 y 30
B. 22 y 31
C. 23 y 29
D. 23 y 30

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Aleatorio |
| **Afirmación** | Describir características de un conjunto a partir de los datos que lo representan. |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 43.3% | 20.3% | 14.8% | 18.4% | 3.4% | 800 |
| Antioquia | 53.8% | 16.9% | 11.9% | 14.7% | 2.8% | 22998 |
| Apartadó | 50.7% | 17.0% | 13.5% | 15.3% | 3.4% | 1358 |
| Arauca | 52.0% | 18.2% | 13.0% | 14.8% | 2.0% | 2079 |
| Armenia | 58.4% | 15.0% | 12.1% | 13.3% | 1.3% | 1915 |
| Atlántico | 48.0% | 19.9% | 12.5% | 15.3% | 4.3% | 4465 |
| Barrancabermeja | 53.4% | 17.7% | 12.4% | 13.9% | 2.6% | 1796 |
| Barranquilla | 51.3% | 18.1% | 12.6% | 15.5% | 2.5% | 7800 |
| Bello | 60.1% | 15.4% | 10.9% | 11.9% | 1.6% | 2933 |
| Bogotá, D.C. | 63.0% | 12.8% | 9.8% | 11.4% | 2.9% | 47936 |
| Bolívar | 41.7% | 19.3% | 14.7% | 18.8% | 5.5% | 8304 |
| Boyacá | 52.4% | 15.9% | 13.6% | 16.4% | 1.7% | 6892 |
| Bucaramanga | 61.3% | 13.8% | 10.8% | 12.6% | 1.5% | 3830 |
| Buenaventura | 52.0% | 19.7% | 11.4% | 13.9% | 3.0% | 2848 |
| Buga | 55.5% | 15.9% | 11.8% | 12.9% | 3.9% | 822 |
| Caldas | 53.5% | 16.2% | 12.6% | 15.6% | 2.0% | 4508 |
| Cali | 59.5% | 14.9% | 10.6% | 12.5% | 2.6% | 14474 |
| Caquetá | 56.3% | 16.1% | 11.8% | 13.6% | 2.2% | 2765 |
| Cartagena | 56.1% | 15.4% | 11.5% | 13.8% | 3.3% | 8114 |
| Cartago | 55.9% | 15.9% | 11.0% | 14.1% | 3.2% | 811 |
| Casanare | 49.2% | 18.3% | 13.1% | 16.5% | 2.8% | 2226 |
| Cauca | 53.0% | 19.1% | 11.0% | 13.6% | 3.3% | 9635 |
| Cesar | 50.5% | 18.5% | 12.6% | 15.2% | 3.2% | 6652 |
| Chocó | 44.7% | 22.5% | 12.3% | 15.6% | 4.9% | 3467 |
| Chía | 67.5% | 11.2% | 7.7% | 12.2% | 1.4% | 961 |
| Ciénaga | 54.6% | 17.7% | 10.3% | 12.6% | 4.7% | 1144 |
| Cundinamarca | 60.3% | 14.2% | 11.1% | 12.4% | 2.0% | 11911 |
| Córdoba | 47.1% | 18.4% | 13.9% | 17.0% | 3.6% | 9883 |
| Cúcuta | 56.6% | 15.4% | 12.3% | 14.1% | 1.5% | 5554 |
| Dosquebradas | 56.2% | 14.7% | 12.7% | 14.0% | 2.4% | 1196 |
| Duitama | 73.1% | 8.8% | 8.2% | 9.4% | 0.5% | 1001 |
| Envigado | 73.7% | 10.6% | 6.7% | 7.7% | 1.3% | 989 |
| Facatativá | 59.8% | 13.4% | 11.8% | 12.5% | 2.5% | 1083 |
| Florencia | 51.1% | 18.0% | 12.7% | 15.6% | 2.6% | 1576 |
| Floridablanca | 63.1% | 13.2% | 9.3% | 12.8% | 1.6% | 1916 |
| Fusagasugá | 59.2% | 15.4% | 11.5% | 12.1% | 1.8% | 1029 |
| Girardot | 51.6% | 18.0% | 12.2% | 16.1% | 2.0% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 58.9% | 14.2% | 11.8% | 13.7% | 1.4% | 1046 |
| Guainía | 0.0% | 50.0% | 50.0% | 0.0% | 0.0% | 2 |
| Guaviare | 46.0% | 18.1% | 13.6% | 18.6% | 3.7% | 807 |
| Huila | 53.6% | 16.2% | 13.5% | 15.1% | 1.6% | 6495 |
| Ibagué | 60.8% | 15.1% | 10.2% | 12.0% | 1.9% | 3872 |
| Ipiales | 59.4% | 13.5% | 13.1% | 12.7% | 1.3% | 1059 |
| Itagüí | 60.1% | 15.4% | 10.8% | 11.9% | 1.9% | 1338 |
| Jamundí | 50.6% | 17.7% | 11.8% | 16.4% | 3.6% | 813 |
| La Guajira | 48.0% | 18.8% | 14.2% | 15.2% | 3.8% | 3168 |
| Lorica | 47.4% | 17.4% | 14.5% | 17.7% | 3.0% | 1210 |
| Magangué | 39.3% | 19.6% | 16.6% | 20.0% | 4.5% | 1322 |
| Magdalena | 45.8% | 19.5% | 12.9% | 16.3% | 5.5% | 6778 |
| Maicao | 44.7% | 18.3% | 14.4% | 19.8% | 2.9% | 1598 |
| Malambo | 52.3% | 15.0% | 14.3% | 13.4% | 4.9% | 1034 |
| Manizales | 59.8% | 12.7% | 11.4% | 14.2% | 1.8% | 2464 |
| Medellín | 57.1% | 15.3% | 11.5% | 13.4% | 2.8% | 15397 |
| Meta | 52.0% | 17.3% | 12.5% | 15.2% | 3.0% | 4322 |
| Montería | 48.0% | 17.0% | 14.7% | 17.0% | 3.3% | 3813 |
| Mosquera | 66.6% | 12.9% | 7.9% | 11.1% | 1.5% | 853 |
| Nariño | 58.6% | 15.1% | 10.6% | 12.5% | 3.2% | 7671 |
| Neiva | 54.8% | 16.2% | 12.5% | 14.0% | 2.5% | 2916 |
| Norte de Santander | 59.5% | 15.0% | 11.7% | 12.2% | 1.7% | 6070 |
| Palmira | 57.7% | 14.0% | 12.4% | 14.1% | 1.7% | 2029 |
| Pasto | 64.0% | 11.8% | 11.6% | 11.2% | 1.3% | 3139 |
| Pereira | 53.3% | 17.3% | 12.2% | 14.3% | 2.9% | 3308 |
| Piedecuesta | 61.9% | 14.7% | 10.6% | 11.0% | 1.7% | 1127 |
| Pitalito | 53.4% | 16.4% | 13.5% | 15.3% | 1.4% | 1278 |
| Popayán | 58.2% | 15.8% | 11.3% | 13.3% | 1.5% | 2111 |
| Putumayo | 52.7% | 15.9% | 13.3% | 16.3% | 1.8% | 3175 |
| Quibdó | 44.5% | 20.3% | 14.2% | 16.4% | 4.7% | 1100 |
| Quindío | 52.9% | 16.2% | 14.1% | 14.0% | 2.9% | 2049 |
| Riohacha | 50.2% | 18.4% | 13.5% | 15.4% | 2.5% | 2024 |
| Rionegro | 62.1% | 14.3% | 11.6% | 11.5% | 0.6% | 812 |
| Risaralda | 53.9% | 15.6% | 12.8% | 15.2% | 2.4% | 2284 |
| Sabaneta | 64.2% | 12.7% | 8.8% | 12.4% | 1.8% | 330 |
| Sahagún | 47.3% | 18.1% | 12.6% | 18.5% | 3.5% | 997 |
| San Andrés | 52.4% | 19.6% | 12.2% | 12.9% | 2.9% | 418 |
| Santa Marta | 51.5% | 17.0% | 12.1% | 15.4% | 4.0% | 4045 |
| Santander | 58.5% | 14.8% | 11.6% | 14.0% | 1.2% | 6364 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 51.0% | 17.0% | 13.6% | 15.3% | 3.0% | 2577 |
| Soacha | 61.7% | 12.7% | 11.3% | 12.9% | 1.4% | 4049 |
| Sogamoso | 63.3% | 14.1% | 9.1% | 12.6% | 0.8% | 1118 |
| Soledad | 56.3% | 17.8% | 11.8% | 12.7% | 1.4% | 3865 |
| Sucre | 44.3% | 19.6% | 15.0% | 17.6% | 3.5% | 6081 |
| Tolima | 53.1% | 16.8% | 12.0% | 15.5% | 2.7% | 7516 |
| Tuluá | 59.2% | 12.6% | 12.6% | 13.6% | 2.1% | 1638 |
| Tumaco | 42.9% | 21.8% | 12.9% | 14.1% | 8.3% | 2161 |
| Tunja | 64.1% | 13.1% | 9.5% | 11.7% | 1.6% | 1288 |
| Turbo | 44.7% | 19.1% | 14.7% | 16.7% | 4.8% | 1474 |
| Uribia | 38.0% | 21.4% | 14.0% | 19.8% | 6.9% | 729 |
| Valle del Cauca | 53.4% | 16.2% | 12.8% | 14.7% | 2.9% | 6459 |
| Valledupar | 52.6% | 17.0% | 11.9% | 15.1% | 3.5% | 3519 |
| Vaupés | 20.0% | 0.0% | 0.0% | 20.0% | 60.0% | 5 |
| Vichada | 40.3% | 24.5% | 13.8% | 17.9% | 3.5% | 543 |
| Villavicencio | 59.6% | 14.4% | 11.4% | 13.1% | 1.5% | 4132 |
| Yopal | 56.6% | 14.3% | 11.6% | 15.2% | 2.2% | 1346 |
| Yumbo | 53.1% | 17.9% | 12.0% | 14.8% | 2.3% | 933 |
| Zipaquirá | 63.8% | 12.3% | 10.0% | 12.7% | 1.2% | 987 |
| Colombia | 55.3% | 16.0% | 11.9% | 14.1% | 2.8% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 31.

Estas son las frutas preferidas de 11 niños.

Fresa, banano, manzana, piña, manzana, manzana, manzana,
fresa, manzana, manzana, uva.

¿Cuál es la fruta preferida por la mayoría de niños de este grupo?

A. Fresa.
B. Manzana.
C. Piña.
D. Uva.

## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Aleatorio |
| **Afirmación** | Describir tendencias que se presentan en un conjunto a partir de los datos que lo describen. |
| **Nivel de desempeño** | Mínimo |
| **Respuesta Correcta** | B |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 10.1% | 71.6% | 6.6% | 7.6% | 4.0% | 800 |
| Antioquia | 7.0% | 80.4% | 5.4% | 4.5% | 2.8% | 22998 |
| Apartadó | 9.1% | 77.0% | 5.3% | 4.9% | 3.7% | 1358 |
| Arauca | 7.5% | 80.6% | 5.2% | 4.3% | 2.4% | 2079 |
| Armenia | 7.4% | 83.6% | 4.6% | 3.0% | 1.4% | 1915 |
| Atlántico | 8.1% | 74.4% | 6.7% | 6.1% | 4.6% | 4465 |
| Barrancabermeja | 6.8% | 83.0% | 4.5% | 3.3% | 2.3% | 1796 |
| Barranquilla | 7.4% | 81.3% | 4.5% | 4.4% | 2.5% | 7800 |
| Bello | 5.7% | 86.7% | 3.4% | 2.2% | 1.9% | 2933 |
| Bogotá, D.C. | 4.8% | 86.7% | 3.0% | 2.5% | 3.0% | 47936 |
| Bolívar | 10.3% | 66.4% | 9.9% | 8.2% | 5.2% | 8304 |
| Boyacá | 7.9% | 79.0% | 5.8% | 5.3% | 2.0% | 6892 |
| Bucaramanga | 5.4% | 87.5% | 2.7% | 2.6% | 1.9% | 3830 |
| Buenaventura | 7.4% | 80.3% | 4.9% | 4.7% | 2.6% | 2848 |
| Buga | 3.8% | 86.7% | 3.3% | 2.1% | 4.1% | 822 |
| Caldas | 6.2% | 83.0% | 4.6% | 4.1% | 2.1% | 4508 |
| Cali | 6.1% | 85.9% | 2.9% | 2.5% | 2.6% | 14474 |
| Caquetá | 8.1% | 79.2% | 6.3% | 4.5% | 1.9% | 2765 |
| Cartagena | 7.7% | 79.3% | 4.9% | 4.6% | 3.6% | 8114 |
| Cartago | 6.7% | 83.8% | 3.6% | 3.0% | 3.0% | 811 |
| Casanare | 8.5% | 76.8% | 5.6% | 5.6% | 3.4% | 2226 |
| Cauca | 8.4% | 76.4% | 6.5% | 5.4% | 3.3% | 9635 |
| Cesar | 8.0% | 78.2% | 4.9% | 5.9% | 3.1% | 6652 |
| Chocó | 9.0% | 66.5% | 10.2% | 9.1% | 5.1% | 3467 |
| Chía | 4.3% | 89.1% | 3.4% | 1.7% | 1.6% | 961 |
| Ciénaga | 6.3% | 77.4% | 5.4% | 5.7% | 5.2% | 1144 |
| Cundinamarca | 6.0% | 84.8% | 3.7% | 3.3% | 2.2% | 11911 |
| Córdoba | 8.8% | 72.2% | 8.2% | 7.1% | 3.8% | 9883 |
| Cúcuta | 6.4% | 85.1% | 3.5% | 3.6% | 1.5% | 5554 |
| Dosquebradas | 5.4% | 83.5% | 4.7% | 3.3% | 3.1% | 1196 |
| Duitama | 3.4% | 91.8% | 2.2% | 2.2% | 0.4% | 1001 |
| Envigado | 4.4% | 90.8% | 2.0% | 1.2% | 1.5% | 989 |
| Facatativá | 5.3% | 86.3% | 3.0% | 2.9% | 2.6% | 1083 |
| Florencia | 8.0% | 79.6% | 5.5% | 3.9% | 2.9% | 1576 |
| Floridablanca | 4.7% | 88.5% | 2.8% | 2.2% | 1.7% | 1916 |
| Fusagasugá | 6.7% | 84.6% | 3.3% | 2.9% | 2.4% | 1029 |
| Girardot | 7.3% | 81.7% | 3.8% | 3.6% | 3.6% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 7.2% | 85.3% | 3.5% | 3.0% | 1.1% | 1046 |
| Guainía | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 2 |
| Guaviare | 10.3% | 73.1% | 7.7% | 5.2% | 3.7% | 807 |
| Huila | 8.1% | 80.8% | 5.0% | 4.5% | 1.6% | 6495 |
| Ibagué | 5.7% | 86.1% | 3.3% | 2.8% | 2.1% | 3872 |
| Ipiales | 4.8% | 86.2% | 4.2% | 3.5% | 1.2% | 1059 |
| Itagüí | 6.9% | 83.3% | 4.3% | 3.3% | 2.3% | 1338 |
| Jamundí | 8.6% | 80.8% | 3.2% | 4.9% | 2.5% | 813 |
| La Guajira | 8.4% | 74.9% | 6.8% | 6.0% | 3.9% | 3168 |
| Lorica | 11.1% | 69.4% | 8.3% | 8.2% | 3.1% | 1210 |
| Magangué | 11.6% | 64.8% | 10.2% | 8.5% | 4.8% | 1322 |
| Magdalena | 8.9% | 70.1% | 8.5% | 7.2% | 5.4% | 6778 |
| Maicao | 8.8% | 72.8% | 6.3% | 8.4% | 3.8% | 1598 |
| Malambo | 7.3% | 78.4% | 5.6% | 4.4% | 4.3% | 1034 |
| Manizales | 5.4% | 86.3% | 3.4% | 3.0% | 1.8% | 2464 |
| Medellín | 6.2% | 83.8% | 3.7% | 3.4% | 2.9% | 15397 |
| Meta | 7.0% | 78.3% | 6.1% | 5.3% | 3.4% | 4322 |
| Montería | 7.7% | 76.3% | 6.0% | 6.4% | 3.6% | 3813 |
| Mosquera | 4.2% | 88.3% | 3.8% | 2.6% | 1.2% | 853 |
| Nariño | 6.6% | 81.3% | 4.5% | 4.5% | 3.1% | 7671 |
| Neiva | 7.8% | 82.2% | 4.0% | 3.3% | 2.7% | 2916 |
| Norte de Santander | 6.8% | 82.8% | 4.1% | 4.7% | 1.7% | 6070 |
| Palmira | 4.2% | 89.2% | 2.8% | 2.2% | 1.6% | 2029 |
| Pasto | 4.8% | 87.6% | 3.2% | 2.9% | 1.5% | 3139 |
| Pereira | 6.0% | 84.2% | 3.8% | 2.8% | 3.1% | 3308 |
| Piedecuesta | 4.3% | 88.1% | 3.0% | 2.8% | 1.7% | 1127 |
| Pitalito | 8.8% | 83.1% | 3.4% | 3.3% | 1.4% | 1278 |
| Popayán | 6.6% | 86.2% | 3.2% | 2.7% | 1.3% | 2111 |
| Putumayo | 9.5% | 78.0% | 5.8% | 4.8% | 1.9% | 3175 |
| Quibdó | 8.2% | 74.1% | 6.5% | 5.6% | 5.5% | 1100 |
| Quindío | 7.0% | 81.0% | 4.9% | 4.5% | 2.6% | 2049 |
| Riohacha | 7.4% | 76.9% | 6.4% | 6.1% | 3.2% | 2024 |
| Rionegro | 6.3% | 84.0% | 5.3% | 3.6% | 0.9% | 812 |
| Risaralda | 7.5% | 80.0% | 5.3% | 4.6% | 2.5% | 2284 |
| Sabaneta | 3.6% | 92.1% | 0.9% | 1.5% | 1.8% | 330 |
| Sahagún | 7.9% | 76.0% | 6.3% | 6.4% | 3.3% | 997 |
| San Andrés | 9.8% | 76.1% | 6.0% | 6.0% | 2.2% | 418 |
| Santa Marta | 7.2% | 79.9% | 4.5% | 4.7% | 3.8% | 4045 |
| Santander | 6.8% | 83.6% | 4.1% | 4.2% | 1.3% | 6364 |

Continúa en la siguiente página

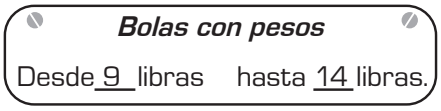
| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 6.3% | 80.4% | 4.5% | 5.5% | 3.2% | 2577 |
| Soacha | 4.9% | 87.9% | 3.7% | 2.2% | 1.3% | 4049 |
| Sogamoso | 4.8% | 88.6% | 2.9% | 2.8% | 0.9% | 1118 |
| Soledad | 7.6% | 82.3% | 4.5% | 4.0% | 1.6% | 3865 |
| Sucre | 8.9% | 71.3% | 8.8% | 7.4% | 3.6% | 6081 |
| Tolima | 7.7% | 78.2% | 6.0% | 5.5% | 2.6% | 7516 |
| Tuluá | 5.2% | 85.8% | 3.1% | 3.8% | 2.0% | 1638 |
| Tumaco | 9.1% | 65.5% | 8.5% | 8.8% | 8.1% | 2161 |
| Tunja | 4.5% | 87.5% | 3.6% | 2.7% | 1.6% | 1288 |
| Turbo | 10.4% | 67.9% | 8.6% | 8.1% | 5.0% | 1474 |
| Uribia | 10.8% | 62.6% | 10.3% | 8.2% | 8.1% | 729 |
| Valle del Cauca | 6.4% | 82.1% | 4.9% | 3.7% | 2.9% | 6459 |
| Valledupar | 7.9% | 80.0% | 3.8% | 4.3% | 4.1% | 3519 |
| Vaupés | 0.0% | 40.0% | 0.0% | 0.0% | 60.0% | 5 |
| Vichada | 8.3% | 71.6% | 8.8% | 7.0% | 4.2% | 543 |
| Villavicencio | 5.8% | 86.5% | 3.0% | 3.0% | 1.7% | 4132 |
| Yopal | 6.8% | 83.5% | 4.0% | 3.3% | 2.4% | 1346 |
| Yumbo | 7.9% | 81.2% | 4.4% | 4.0% | 2.5% | 933 |
| Zipaquirá | 5.1% | 88.8% | 2.1% | 2.6% | 1.4% | 987 |
| Colombia | 6.9% | 81.1% | 4.8% | 4.3% | 2.9% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

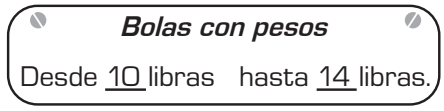
- **Pregunta 32.**

El aviso correcto que debe tener el estante es

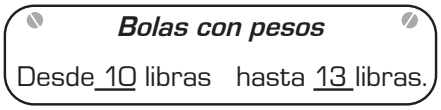
A.



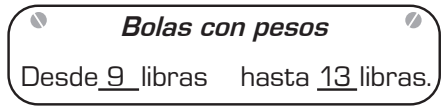

B.




C.




D.



## • Estructura

| | |
|---|---|
| **Competencia** | Razonamiento y argumentación |
| **Componente** | Aleatorio |
| **Afirmación** | Describir tendencias que se presentan en un conjunto a partir de los datos que lo describen. |
| **Nivel de desempeño** | Avanzado |
| **Respuesta Correcta** | A |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 36.8% | 26.1% | 18.0% | 14.1% | 5.0% | 800 |
| Antioquia | 43.7% | 24.3% | 16.6% | 12.0% | 3.3% | 22998 |
| Apartadó | 40.2% | 23.6% | 19.5% | 12.7% | 4.1% | 1358 |
| Arauca | 43.2% | 24.0% | 17.5% | 12.3% | 3.1% | 2079 |
| Armenia | 44.8% | 22.8% | 18.6% | 11.8% | 2.0% | 1915 |
| Atlántico | 44.1% | 22.5% | 16.8% | 11.2% | 5.3% | 4465 |
| Barrancabermeja | 46.9% | 23.7% | 15.8% | 10.5% | 3.1% | 1796 |
| Barranquilla | 44.8% | 23.7% | 17.2% | 11.1% | 3.3% | 7800 |
| Bello | 46.9% | 22.5% | 17.1% | 11.4% | 2.1% | 2933 |
| Bogotá, D.C. | 50.9% | 19.5% | 16.3% | 9.8% | 3.5% | 47936 |
| Bolívar | 34.3% | 25.2% | 20.0% | 14.4% | 6.0% | 8304 |
| Boyacá | 40.1% | 24.0% | 19.5% | 13.9% | 2.5% | 6892 |
| Bucaramanga | 52.3% | 20.8% | 15.4% | 9.0% | 2.5% | 3830 |
| Buenaventura | 52.6% | 21.7% | 13.9% | 8.5% | 3.3% | 2848 |
| Buga | 49.1% | 19.2% | 18.1% | 9.4% | 4.1% | 822 |
| Caldas | 44.4% | 22.7% | 18.2% | 12.3% | 2.5% | 4508 |
| Cali | 52.1% | 20.6% | 14.9% | 9.2% | 3.1% | 14474 |
| Caquetá | 47.3% | 22.4% | 15.7% | 12.2% | 2.5% | 2765 |
| Cartagena | 49.3% | 20.6% | 15.4% | 10.4% | 4.3% | 8114 |
| Cartago | 43.6% | 21.0% | 18.9% | 12.5% | 4.1% | 811 |
| Casanare | 37.4% | 24.3% | 21.2% | 13.2% | 4.0% | 2226 |
| Cauca | 49.3% | 21.6% | 14.3% | 10.6% | 4.2% | 9635 |
| Cesar | 45.0% | 23.0% | 16.3% | 12.0% | 3.6% | 6652 |
| Chocó | 40.2% | 24.7% | 17.2% | 11.5% | 6.4% | 3467 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Chía | 57.9% | 16.6% | 15.0% | 8.7% | 1.8% | 961 |
| Ciénaga | 53.1% | 21.0% | 12.2% | 8.9% | 4.9% | 1144 |
| Cundinamarca | 48.2% | 20.8% | 16.9% | 11.5% | 2.7% | 11911 |
| Córdoba | 40.0% | 24.8% | 17.4% | 13.4% | 4.4% | 9883 |
| Cúcuta | 45.1% | 23.9% | 17.2% | 11.8% | 2.1% | 5554 |
| Dosquebradas | 44.2% | 23.5% | 17.0% | 11.7% | 3.6% | 1196 |
| Duitama | 59.2% | 16.6% | 14.1% | 9.6% | 0.5% | 1001 |
| Envigado | 58.9% | 18.0% | 13.2% | 7.8% | 2.0% | 989 |
| Facatativá | 47.3% | 21.5% | 18.8% | 9.6% | 2.8% | 1083 |
| Florencia | 40.5% | 26.1% | 17.8% | 12.2% | 3.3% | 1576 |
| Floridablanca | 53.1% | 20.7% | 14.5% | 9.2% | 2.5% | 1916 |
| Fusagasugá | 44.0% | 23.7% | 19.3% | 9.9% | 3.0% | 1029 |
| Girardot | 44.5% | 21.1% | 16.0% | 14.5% | 3.9% | 688 |
| Girón | 46.4% | 21.0% | 18.7% | 12.0% | 1.8% | 1046 |
| Guainía | 50.0% | 50.0% | 0.0% | 0.0% | 0.0% | 2 |
| Guaviare | 37.7% | 27.5% | 17.0% | 12.9% | 5.0% | 807 |
| Huila | 42.2% | 24.4% | 18.0% | 13.1% | 2.3% | 6495 |
| Ibagué | 50.0% | 20.9% | 16.3% | 10.3% | 2.5% | 3872 |
| Ipiales | 49.1% | 21.2% | 15.4% | 13.1% | 1.2% | 1059 |
| Itagüí | 46.0% | 20.6% | 18.8% | 12.1% | 2.5% | 1338 |
| Jamundí | 41.6% | 25.6% | 16.9% | 13.0% | 3.0% | 813 |
| La Guajira | 46.2% | 23.6% | 15.2% | 10.7% | 4.3% | 3168 |
| Lorica | 41.1% | 22.8% | 17.9% | 15.2% | 3.1% | 1210 |
| Magangué | 31.1% | 27.5% | 18.1% | 17.6% | 5.7% | 1322 |
| Magdalena | 40.6% | 23.9% | 16.7% | 12.4% | 6.4% | 6778 |
| Maicao | 40.2% | 24.1% | 17.6% | 13.7% | 4.4% | 1598 |
| Malambo | 55.0% | 18.0% | 12.0% | 9.3% | 5.7% | 1034 |
| Manizales | 47.0% | 22.6% | 16.3% | 11.3% | 2.7% | 2464 |
| Medellín | 44.7% | 23.7% | 16.7% | 11.3% | 3.7% | 15397 |
| Meta | 40.3% | 25.4% | 17.7% | 12.7% | 4.0% | 4322 |
| Montería | 36.0% | 25.0% | 21.1% | 14.0% | 3.9% | 3813 |
| Mosquera | 52.4% | 19.0% | 17.0% | 9.1% | 2.5% | 853 |
| Nariño | 50.0% | 20.8% | 14.3% | 11.2% | 3.6% | 7671 |
| Neiva | 43.4% | 24.5% | 17.8% | 11.4% | 2.9% | 2916 |
| Norte de Santander | 49.6% | 22.0% | 15.3% | 11.3% | 1.8% | 6070 |
| Palmira | 49.4% | 22.6% | 16.7% | 9.0% | 2.2% | 2029 |
| Pasto | 48.8% | 22.1% | 16.0% | 11.0% | 2.1% | 3139 |
| Pereira | 44.4% | 23.6% | 17.5% | 10.6% | 3.9% | 3308 |
| Piedecuesta | 51.5% | 20.6% | 13.9% | 11.1% | 2.9% | 1127 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Pitalito | 44.8% | 24.4% | 17.8% | 11.0% | 2.0% | 1278 |
| Popayán | 51.6% | 21.2% | 14.9% | 10.6% | 1.8% | 2111 |
| Putumayo | 39.2% | 25.1% | 19.5% | 13.4% | 2.8% | 3175 |
| Quibdó | 42.9% | 21.7% | 16.1% | 13.0% | 6.3% | 1100 |
| Quindío | 42.2% | 25.6% | 18.0% | 10.9% | 3.3% | 2049 |
| Riohacha | 43.4% | 24.1% | 15.6% | 12.6% | 4.3% | 2024 |
| Rionegro | 47.8% | 21.9% | 18.8% | 10.1% | 1.4% | 812 |
| Risaralda | 42.7% | 24.2% | 17.4% | 12.9% | 2.8% | 2284 |
| Sabaneta | 61.8% | 17.3% | 10.3% | 7.9% | 2.7% | 330 |
| Sahagún | 37.4% | 23.2% | 21.7% | 13.8% | 3.9% | 997 |
| San Andrés | 39.7% | 24.9% | 21.1% | 12.0% | 2.4% | 418 |
| Santa Marta | 46.3% | 21.8% | 15.8% | 11.6% | 4.4% | 4045 |
| Santander | 49.9% | 21.4% | 15.1% | 11.7% | 1.9% | 6364 |
| Sincelejo | 44.5% | 22.0% | 17.5% | 12.1% | 3.8% | 2577 |
| Soacha | 49.4% | 21.7% | 16.8% | 10.5% | 1.7% | 4049 |
| Sogamoso | 49.6% | 22.2% | 16.1% | 11.2% | 1.0% | 1118 |
| Soledad | 47.6% | 23.4% | 15.5% | 11.6% | 1.9% | 3865 |
| Sucre | 38.0% | 25.1% | 18.5% | 13.7% | 4.7% | 6081 |
| Tolima | 43.6% | 24.1% | 16.8% | 12.4% | 3.2% | 7516 |
| Tuluá | 48.5% | 22.8% | 15.1% | 10.7% | 2.9% | 1638 |
| Tumaco | 37.2% | 23.2% | 17.8% | 12.7% | 9.1% | 2161 |
| Tunja | 52.3% | 20.3% | 14.8% | 10.9% | 1.7% | 1288 |
| Turbo | 35.4% | 24.3% | 20.0% | 14.7% | 5.6% | 1474 |
| Uribia | 29.6% | 30.6% | 19.5% | 12.2% | 8.1% | 729 |
| Valle del Cauca | 44.8% | 23.2% | 17.1% | 11.4% | 3.5% | 6459 |
| Valledupar | 46.9% | 21.6% | 16.4% | 10.5% | 4.6% | 3519 |
| Vaupés | 0.0% | 20.0% | 20.0% | 0.0% | 60.0% | 5 |
| Vichada | 38.1% | 27.8% | 16.9% | 12.2% | 5.0% | 543 |
| Villavicencio | 47.4% | 22.3% | 17.7% | 10.5% | 2.1% | 4132 |
| Yopal | 39.4% | 24.2% | 18.9% | 14.5% | 3.0% | 1346 |
| Yumbo | 41.5% | 23.2% | 16.8% | 15.1% | 3.4% | 933 |
| Zipaquirá | 56.3% | 17.8% | 14.3% | 9.5% | 2.0% | 987 |
| Colombia | 45.9% | 22.5% | 16.7% | 11.4% | 3.5% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

## • Pregunta 33.

Hugo y Pedro elaboraron una lista de las actividades que realizaron durante las vacaciones.

- Jugar fútbol
- Nadar
- Correr
- Montar bicicleta
- Ver televisión

**Hugo**

**Pedro**

- Nadar
- Ver televisión
- Correr
- Jugar fútbol

¿Cuál es la diferencia entre las actividades que realizaron Hugo y Pedro?

A. Que Hugo jugó fútbol y Pedro no.
B. Que Hugo montó bicicleta y Pedro no.
C. Que Pedro corrió y Hugo no.
D. Que Pedro vio televisión y Hugo no.

## • Estructura

| | |
|---|---|
| **Competencia** | Comunicación, representación y modelación |
| **Componente** | Aleatorio |
| **Afirmación** | Describir características de un conjunto a partir de los datos que lo representan |
| **Nivel de desempeño** | Satisfactorio |
| **Respuesta Correcta** | B |

## • Resultados a nivel de Entidad Territorial certificada (ETC)

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Amazonas | 14.4% | 52.6% | 14.4% | 13.6% | 5.0% | 800 |
| Antioquia | 14.1% | 60.1% | 10.9% | 11.2% | 3.7% | 22998 |
| Apartadó | 15.1% | 55.7% | 13.3% | 11.1% | 4.8% | 1358 |
| Arauca | 13.9% | 60.6% | 11.3% | 11.0% | 3.1% | 2079 |
| Armenia | 12.8% | 69.3% | 7.8% | 8.2% | 1.8% | 1915 |
| Atlántico | 13.6% | 56.6% | 10.4% | 13.4% | 6.0% | 4465 |
| Barrancabermeja | 13.0% | 65.8% | 8.9% | 8.6% | 3.7% | 1796 |
| Barranquilla | 12.8% | 63.6% | 10.3% | 9.9% | 3.4% | 7800 |
| Bello | 12.2% | 69.9% | 7.5% | 8.1% | 2.3% | 2933 |
| Bogotá, D.C. | 9.7% | 73.1% | 6.8% | 6.6% | 3.7% | 47936 |
| Bolívar | 17.0% | 43.6% | 15.1% | 17.0% | 7.2% | 8304 |
| Boyacá | 14.4% | 58.9% | 12.3% | 11.6% | 2.8% | 6892 |
| Bucaramanga | 10.4% | 73.3% | 7.0% | 6.7% | 2.6% | 3830 |
| Buenaventura | 12.5% | 61.2% | 10.8% | 11.9% | 3.6% | 2848 |
| Buga | 11.6% | 69.2% | 7.3% | 8.0% | 3.9% | 822 |
| Caldas | 13.3% | 63.1% | 9.9% | 10.8% | 2.9% | 4508 |
| Cali | 10.8% | 71.9% | 6.9% | 7.1% | 3.4% | 14474 |
| Caquetá | 12.9% | 60.9% | 12.2% | 11.4% | 2.5% | 2765 |
| Cartagena | 12.6% | 62.2% | 9.9% | 10.8% | 4.5% | 8114 |
| Cartago | 13.9% | 61.7% | 9.1% | 11.0% | 4.3% | 811 |
| Casanare | 15.5% | 56.0% | 12.3% | 12.4% | 3.9% | 2226 |
| Cauca | 12.5% | 61.5% | 10.6% | 11.5% | 3.9% | 9635 |
| Cesar | 12.9% | 59.2% | 11.2% | 12.6% | 4.1% | 6652 |
| Chocó | 15.6% | 48.3% | 13.1% | 16.7% | 6.3% | 3467 |
| Chía | 8.3% | 74.6% | 7.5% | 6.8% | 2.8% | 961 |
| Ciénaga | 12.8% | 63.1% | 9.4% | 9.4% | 5.2% | 1144 |
| Cundinamarca | 10.6% | 69.3% | 8.5% | 8.6% | 3.0% | 11911 |
| Córdoba | 15.1% | 51.3% | 13.5% | 15.3% | 4.8% | 9883 |
| Cúcuta | 12.9% | 65.5% | 10.1% | 9.2% | 2.4% | 5554 |
| Dosquebradas | 10.6% | 70.0% | 7.5% | 7.4% | 4.4% | 1196 |
| Duitama | 8.7% | 76.9% | 8.2% | 5.4% | 0.8% | 1001 |
| Envigado | 8.3% | 79.7% | 4.6% | 5.6% | 1.9% | 989 |
| Facatativá | 9.1% | 71.3% | 8.6% | 7.2% | 3.8% | 1083 |
| Florencia | 13.8% | 59.8% | 11.7% | 10.8% | 3.9% | 1576 |
| Floridablanca | 9.2% | 74.8% | 7.7% | 5.6% | 2.7% | 1916 |
| Fusagasugá | 10.8% | 69.6% | 7.7% | 9.3% | 2.6% | 1029 |
| Girardot | 12.4% | 63.4% | 10.3% | 9.7% | 4.2% | 688 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Girón | 14.1% | 66.3% | 8.0% | 9.4% | 2.2% | 1046 |
| Guainía | 0.0% | 50.0% | 0.0% | 50.0% | 0.0% | 2 |
| Guaviare | 14.0% | 52.9% | 13.5% | 14.4% | 5.2% | 807 |
| Huila | 13.9% | 59.4% | 12.6% | 11.4% | 2.7% | 6495 |
| Ibagué | 10.1% | 70.9% | 8.2% | 7.7% | 3.1% | 3872 |
| Ipiales | 10.3% | 70.8% | 8.7% | 8.3% | 1.9% | 1059 |
| Itagüí | 12.4% | 67.9% | 6.5% | 9.9% | 3.3% | 1338 |
| Jamundí | 15.1% | 62.4% | 9.3% | 9.7% | 3.4% | 813 |
| La Guajira | 14.2% | 55.7% | 11.8% | 13.4% | 4.9% | 3168 |
| Lorica | 13.5% | 52.8% | 15.0% | 14.8% | 3.9% | 1210 |
| Magangué | 17.2% | 42.7% | 18.2% | 16.6% | 5.1% | 1322 |
| Magdalena | 15.8% | 48.2% | 13.1% | 15.9% | 7.0% | 6778 |
| Maicao | 15.3% | 52.8% | 12.4% | 14.8% | 4.7% | 1598 |
| Malambo | 12.6% | 62.4% | 10.3% | 9.5% | 5.3% | 1034 |
| Manizales | 11.2% | 69.9% | 8.0% | 8.1% | 2.7% | 2464 |
| Medellín | 13.0% | 66.5% | 8.2% | 8.3% | 4.0% | 15397 |
| Meta | 14.1% | 59.4% | 11.1% | 11.0% | 4.4% | 4322 |
| Montería | 13.0% | 57.1% | 13.5% | 11.7% | 4.6% | 3813 |
| Mosquera | 10.7% | 74.7% | 6.7% | 5.6% | 2.3% | 853 |
| Nariño | 11.6% | 65.6% | 9.1% | 10.2% | 3.4% | 7671 |
| Neiva | 13.6% | 63.5% | 9.7% | 9.5% | 3.6% | 2916 |
| Norte de Santander | 12.0% | 66.4% | 9.9% | 9.4% | 2.4% | 6070 |
| Palmira | 11.4% | 69.9% | 8.3% | 7.6% | 2.8% | 2029 |
| Pasto | 11.6% | 69.8% | 8.2% | 8.2% | 2.1% | 3139 |
| Pereira | 12.7% | 66.7% | 7.9% | 8.6% | 4.1% | 3308 |
| Piedecuesta | 9.7% | 71.9% | 8.6% | 6.2% | 3.6% | 1127 |
| Pitalito | 12.9% | 64.8% | 9.9% | 9.7% | 2.7% | 1278 |
| Popayán | 10.8% | 71.5% | 8.1% | 7.8% | 1.8% | 2111 |
| Putumayo | 16.2% | 56.9% | 12.2% | 11.8% | 2.9% | 3175 |
| Quibdó | 11.1% | 57.5% | 11.4% | 14.1% | 5.9% | 1100 |
| Quindío | 15.2% | 61.3% | 10.0% | 10.0% | 3.6% | 2049 |
| Riohacha | 14.6% | 57.1% | 10.4% | 13.1% | 4.8% | 2024 |
| Rionegro | 11.2% | 69.2% | 9.0% | 9.1% | 1.5% | 812 |
| Risaralda | 15.2% | 59.5% | 10.2% | 11.6% | 3.5% | 2284 |
| Sabaneta | 8.5% | 78.2% | 5.5% | 5.5% | 2.4% | 330 |
| Sahagún | 15.4% | 54.5% | 11.6% | 13.9% | 4.5% | 997 |
| San Andrés | 12.9% | 57.7% | 12.0% | 14.4% | 3.1% | 418 |
| Santa Marta | 13.3% | 61.3% | 10.2% | 10.7% | 4.5% | 4045 |
| Santander | 11.3% | 67.3% | 9.5% | 10.2% | 1.8% | 6364 |

Continúa en la siguiente página

| ETC/País | A | B | C | D | Omisión y multimarca | N° estudiantes |
|---|---|---|---|---|---|---|
| Sincelejo | 13.4% | 60.3% | 11.7% | 10.2% | 4.4% | 2577 |
| Soacha | 10.4% | 73.3% | 6.8% | 7.8% | 1.7% | 4049 |
| Sogamoso | 11.0% | 72.7% | 8.0% | 7.1% | 1.3% | 1118 |
| Soledad | 12.9% | 65.2% | 10.0% | 9.6% | 2.3% | 3865 |
| Sucre | 16.0% | 49.6% | 13.8% | 15.8% | 4.8% | 6081 |
| Tolima | 14.3% | 58.7% | 11.3% | 12.3% | 3.4% | 7516 |
| Tuluá | 13.0% | 68.3% | 8.2% | 8.0% | 2.6% | 1638 |
| Tumaco | 14.4% | 49.7% | 13.0% | 13.4% | 9.4% | 2161 |
| Tunja | 7.9% | 73.2% | 7.8% | 8.7% | 2.4% | 1288 |
| Turbo | 17.1% | 45.2% | 14.6% | 16.6% | 6.5% | 1474 |
| Uribia | 15.2% | 46.8% | 12.5% | 17.7% | 7.8% | 729 |
| Valle del Cauca | 13.8% | 61.2% | 10.2% | 10.8% | 3.9% | 6459 |
| Valledupar | 13.3% | 62.8% | 9.4% | 9.9% | 4.6% | 3519 |
| Vaupés | 20.0% | 0.0% | 20.0% | 0.0% | 60.0% | 5 |
| Vichada | 13.6% | 52.7% | 14.5% | 15.5% | 3.7% | 543 |
| Villavicencio | 11.8% | 70.2% | 7.6% | 7.6% | 2.7% | 4132 |
| Yopal | 13.2% | 65.8% | 8.7% | 8.7% | 3.7% | 1346 |
| Yumbo | 16.6% | 57.0% | 10.8% | 11.6% | 4.0% | 933 |
| Zipaquirá | 9.7% | 72.7% | 8.3% | 6.9% | 2.3% | 987 |
| Colombia | 12.6% | 63.6% | 9.8% | 10.2% | 3.8% | 369417 |

*Es posible que los porcentajes mostrados no sumen exactamente 100 debido a aproximaciones decimales.

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